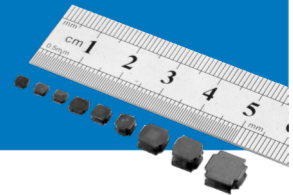


# Wire Wound SMD Power Inductors – SWPA Series



Operating temperature range:  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$  (Including self-heating)

## FEATURES

- ◆ Magnetic-resin shielded construction reduces buzz noise to ultra-low levels
- ◆ Metallization on ferrite core results in excellent shock resistance and damage-free durability
- ◆ Closed magnetic circuit design reduces leakage flux and Electro Magnetic Interference (EMI)
- ◆ 30% higher current rating than conventional inductors of equal size
- ◆ Takes up less PCB real estate and save more power

## APPLICATIONS

- ◆ Smart phone, smart TV, set top box, notebook
- ◆ Car navigation systems, telecomm base stations
- ◆ VR, AR
- ◆ LED lighting

## PRODUCT IDENTIFICATION

|           |           |        |          |        |        |          |
|-----------|-----------|--------|----------|--------|--------|----------|
| 1<br>SWPA | 2<br>3012 | 3<br>S | 4<br>1R0 | 5<br>N | 6<br>T | 7<br>□□□ |
|-----------|-----------|--------|----------|--------|--------|----------|

| 1 Type |                               |
|--------|-------------------------------|
| SWPA   | Wire Wound SMD Power Inductor |

| 3 Feature Type |          |
|----------------|----------|
| S              | Standard |

| 4 Nominal Inductance |                   |
|----------------------|-------------------|
| Example              | Nominal Value     |
| 1R0                  | 1.0 $\mu\text{H}$ |
| 100                  | 10 $\mu\text{H}$  |

| 5 Inductance Tolerance |            |
|------------------------|------------|
| K                      | $\pm 10\%$ |
| M                      | $\pm 20\%$ |
| N                      | $\pm 30\%$ |

| 6 Packing |                      |
|-----------|----------------------|
| T         | Tape Carrier Package |

| 7 Design Code |                           |
|---------------|---------------------------|
| □□□           | Standard product is blank |

| 2 External Dimensions (L×W×H) [mm] |             |
|------------------------------------|-------------|
| 252010                             | 2.5×2.0×1.0 |
| 252012                             | 2.5×2.0×1.2 |
| 3010                               | 3.0×3.0×1.0 |
| 3012                               | 3.0×3.0×1.2 |
| 3015                               | 3.0×3.0×1.5 |
| 4010                               | 4.0×4.0×1.0 |
| 4012                               | 4.0×4.0×1.2 |
| 4018                               | 4.0×4.0×1.8 |
| 4020                               | 4.0×4.0×2.0 |
| 4030                               | 4.0×4.0×3.0 |
| 5012                               | 5.0×5.0×1.2 |
| 5020                               | 5.0×5.0×2.0 |
| 5040                               | 5.0×5.0×4.0 |
| 5045                               | 5.0×5.0×4.5 |
| 6020                               | 6.0×6.0×2.0 |
| 6028                               | 6.0×6.0×2.8 |
| 6045                               | 6.0×6.0×4.5 |
| 8040                               | 8.0×8.0×4.0 |
| 8060                               | 8.0×8.0×6.0 |
| 8065                               | 8.0×8.0×6.5 |

**SHAPE AND DIMENSIONS**

Fig.1

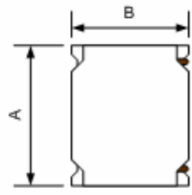


Fig.2

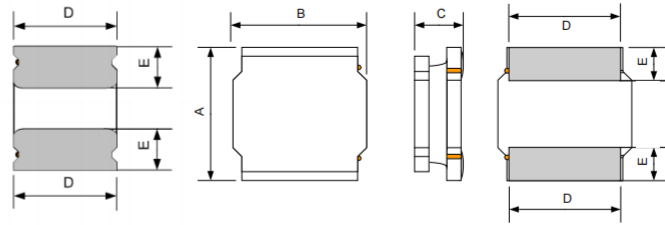
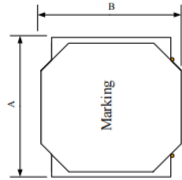
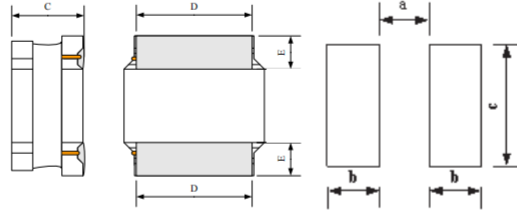


Fig.3



Recommended Land Pattern



| Series      | Shape | A       | B       | C        | D       | E        | a Typ. | b Typ. | c Typ. |
|-------------|-------|---------|---------|----------|---------|----------|--------|--------|--------|
| SWPA252010S | Fig.1 | 2.5±0.1 | 2.0±0.1 | 1.0 Max. | 2.0±0.2 | 0.80±0.2 | 0.80   | 0.85   | 2.0    |
| SWPA252012S | Fig.1 | 2.5±0.1 | 2.0±0.1 | 1.2 Max. | 2.0±0.2 | 0.80±0.2 | 0.80   | 0.85   | 2.0    |
| SWPA3010S   | Fig.2 | 3.0±0.2 | 3.0±0.2 | 1.0 Max. | 2.5±0.2 | 0.75±0.2 | 1.5    | 0.8    | 2.7    |
| SWPA3012S   | Fig.2 | 3.0±0.2 | 3.0±0.2 | 1.2 Max. | 2.5±0.2 | 0.75±0.2 | 1.5    | 0.8    | 2.7    |
| SWPA3015S   | Fig.2 | 3.0±0.2 | 3.0±0.2 | 1.5 Max. | 2.5±0.2 | 0.75±0.2 | 1.5    | 0.8    | 2.7    |
| SWPA4010S   | Fig.2 | 4.0±0.2 | 4.0±0.2 | 1.0 Max. | 3.3±0.2 | 0.95±0.2 | 1.9    | 1.1    | 3.7    |
| SWPA4012S   | Fig.2 | 4.0±0.2 | 4.0±0.2 | 1.2 Max. | 3.3±0.2 | 0.95±0.2 | 1.9    | 1.1    | 3.7    |
| SWPA4018S   | Fig.2 | 4.0±0.2 | 4.0±0.2 | 1.8 Max. | 3.3±0.2 | 0.95±0.2 | 1.9    | 1.1    | 3.7    |
| SWPA4020S   | Fig.2 | 4.0±0.2 | 4.0±0.2 | 2.0 Max. | 3.3±0.2 | 0.95±0.2 | 1.9    | 1.1    | 3.7    |
| SWPA4030S   | Fig.2 | 4.0±0.2 | 4.0±0.2 | 3.0 Max. | 3.3±0.2 | 0.95±0.2 | 1.9    | 1.1    | 3.7    |
| SWPA5012S   | Fig.3 | 5.0±0.2 | 5.0±0.2 | 1.2 Max. | 4.0±0.2 | 1.25±0.2 | 2.3    | 1.4    | 4.2    |
| SWPA5020S   | Fig.3 | 5.0±0.2 | 5.0±0.2 | 2.0 Max. | 4.0±0.2 | 1.25±0.2 | 2.3    | 1.4    | 4.2    |
| SWPA5040S   | Fig.3 | 5.0±0.2 | 5.0±0.2 | 4.0 Max. | 4.0±0.2 | 1.25±0.2 | 2.3    | 1.4    | 4.2    |
| SWPA5045S   | Fig.3 | 5.0±0.2 | 5.0±0.2 | 4.5 Max. | 4.0±0.2 | 1.30±0.2 | 2.3    | 1.4    | 4.2    |
| SWPA6020S   | Fig.2 | 6.0±0.3 | 6.0±0.3 | 2.0 Max. | 4.9±0.3 | 1.55±0.3 | 2.8    | 1.7    | 5.7    |
| SWPA6028S   | Fig.2 | 6.0±0.3 | 6.0±0.3 | 2.8 Max. | 4.9±0.3 | 1.55±0.3 | 2.8    | 1.7    | 5.7    |
| SWPA6045S   | Fig.2 | 6.0±0.3 | 6.0±0.3 | 4.5 Max. | 4.9±0.3 | 1.55±0.3 | 2.8    | 1.7    | 5.7    |
| SWPA8040S   | Fig.2 | 8.0±0.3 | 8.0±0.3 | 4.2 Max. | 6.3±0.3 | 2.00±0.3 | 3.8    | 2.2    | 7.5    |
| SWPA8060S   | Fig.2 | 8.0±0.3 | 8.0±0.3 | 6.0 Max. | 6.3±0.3 | 2.00±0.3 | 3.8    | 2.2    | 7.5    |
| SWPA8065S   | Fig.3 | 8.0±0.3 | 8.0±0.3 | 6.5 Max. | 6.3±0.3 | 2.00±0.3 | 3.8    | 2.2    | 7.5    |

※\*1: All products are printed with Marking except the 252010S, 252012S, 3010S, 3012S and 3015S series.

Unit: mm

## SPECIFICATIONS SWPA252010S Series

| Part Number      | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|------------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                  | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units            | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol           | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA252010SR47NT | 0.47±30%      | 0.056         | 0.047 | 206                     | 2.50               | 3.35 | 2.35                | 2.56 |
| SWPA252010SR56NT | 0.56±30%      | 0.072         | 0.060 | 160                     | 2.90               | 3.20 | 2.00                | 2.18 |
| SWPA252010SR68NT | 0.68±30%      | 0.074         | 0.062 | 129                     | 2.20               | 2.75 | 2.00                | 2.18 |
| SWPA252010S1R0NT | 1.0±30%       | 0.108         | 0.090 | 100                     | 1.85               | 2.20 | 1.65                | 1.80 |
| SWPA252010S1R5NT | 1.5±30%       | 0.182         | 0.152 | 81                      | 1.80               | 2.10 | 1.30                | 1.42 |
| SWPA252010S2R2NT | 2.2±30%       | 0.209         | 0.174 | 61                      | 1.20               | 1.60 | 1.20                | 1.31 |
| SWPA252010S3R3MT | 3.3±20%       | 0.328         | 0.273 | 47                      | 1.05               | 1.30 | 0.90                | 0.98 |
| SWPA252010S4R7MT | 4.7±20%       | 0.563         | 0.469 | 42                      | 0.95               | 1.15 | 0.70                | 0.76 |
| SWPA252010S5R6MT | 5.6±20%       | 0.563         | 0.469 | 35                      | 0.80               | 0.95 | 0.73                | 0.80 |
| SWPA252010S6R8MT | 6.8±20%       | 0.896         | 0.747 | 31                      | 0.78               | 0.92 | 0.59                | 0.64 |
| SWPA252010S100MT | 10±20%        | 1.092         | 0.910 | 27                      | 0.65               | 0.78 | 0.50                | 0.55 |

## SWPA252012S Series

| Part Number      | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|------------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                  | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units            | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol           | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA252012SR47NT | 0.47±30%      | 0.061         | 0.047 | 160                     | 3.82               | 4.27 | 2.15                | 2.34 |
| SWPA252012SR68NT | 0.68±30%      | 0.074         | 0.057 | 140                     | 3.28               | 3.68 | 1.95                | 2.13 |
| SWPA252012S1R0NT | 1.0±30%       | 0.090         | 0.069 | 110                     | 2.59               | 2.90 | 1.93                | 2.10 |
| SWPA252012S1R2NT | 1.2±30%       | 0.129         | 0.099 | 100                     | 2.38               | 2.67 | 1.46                | 1.59 |
| SWPA252012S1R5MT | 1.5±20%       | 0.147         | 0.113 | 97                      | 2.24               | 2.51 | 1.40                | 1.53 |
| SWPA252012S2R2MT | 2.2±20%       | 0.216         | 0.166 | 69                      | 1.85               | 2.07 | 1.15                | 1.25 |
| SWPA252012S2R7MT | 2.7±20%       | 0.239         | 0.184 | 63                      | 1.72               | 1.92 | 1.09                | 1.19 |
| SWPA252012S3R3MT | 3.3±20%       | 0.264         | 0.203 | 62                      | 1.61               | 1.80 | 1.04                | 1.13 |
| SWPA252012S3R6MT | 3.6±20%       | 0.348         | 0.268 | 53                      | 1.46               | 1.64 | 0.90                | 0.98 |
| SWPA252012S4R3MT | 4.3±20%       | 0.377         | 0.290 | 51                      | 1.37               | 1.53 | 0.87                | 0.95 |
| SWPA252012S4R7MT | 4.7±20%       | 0.377         | 0.290 | 47                      | 1.12               | 1.25 | 0.84                | 0.92 |
| SWPA252012S5R1MT | 5.1±20%       | 0.500         | 0.385 | 44                      | 1.23               | 1.37 | 0.75                | 0.82 |
| SWPA252012S5R6MT | 5.6±20%       | 0.538         | 0.414 | 38                      | 1.11               | 1.25 | 0.73                | 0.80 |
| SWPA252012S6R2MT | 6.2±20%       | 0.542         | 0.417 | 38                      | 1.03               | 1.16 | 0.73                | 0.80 |
| SWPA252012S6R8MT | 6.8±20%       | 0.581         | 0.447 | 38                      | 0.98               | 1.09 | 0.69                | 0.75 |
| SWPA252012S7R5MT | 7.5±20%       | 0.611         | 0.470 | 35                      | 0.97               | 1.09 | 0.68                | 0.74 |
| SWPA252012S8R2MT | 8.2±20%       | 0.658         | 0.506 | 36                      | 0.98               | 1.10 | 0.65                | 0.71 |
| SWPA252012S9R1MT | 9.1±20%       | 0.690         | 0.531 | 34                      | 0.91               | 1.02 | 0.62                | 0.68 |
| SWPA252012S100MT | 10±20%        | 0.690         | 0.531 | 34                      | 0.79               | 0.88 | 0.62                | 0.68 |
| SWPA252012S120MT | 12±20%        | 1.075         | 0.827 | 28                      | 0.78               | 0.88 | 0.51                | 0.56 |
| SWPA252012S150MT | 15±20%        | 1.591         | 1.224 | 25                      | 0.68               | 0.77 | 0.42                | 0.46 |
| SWPA252012S220MT | 22±20%        | 1.976         | 1.520 | 20                      | 0.53               | 0.59 | 0.38                | 0.41 |

## SPECIFICATIONS SWPA3010S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA3010S1R0NT | 1.0±30%       | 0.085         | 0.065 | 180                     | 1.40               | 2.10 | 1.45                | 1.80 |
| SWPA3010S1R2NT | 1.2±30%       | 0.085         | 0.065 | 137                     | 1.25               | 1.70 | 1.45                | 1.80 |
| SWPA3010S1R5NT | 1.5±30%       | 0.104         | 0.080 | 120                     | 1.27               | 1.70 | 1.30                | 1.60 |
| SWPA3010S2R2NT | 2.2±30%       | 0.143         | 0.110 | 100                     | 1.15               | 1.50 | 1.09                | 1.40 |
| SWPA3010S2R7NT | 2.7±30%       | 0.169         | 0.130 | 90                      | 1.00               | 1.20 | 1.02                | 1.40 |
| SWPA3010S3R3NT | 3.3±30%       | 0.189         | 0.145 | 74                      | 0.97               | 1.20 | 0.96                | 1.20 |
| SWPA3010S3R6MT | 3.6±20%       | 0.215         | 0.165 | 67                      | 0.95               | 1.20 | 0.90                | 1.10 |
| SWPA3010S4R7MT | 4.7±20%       | 0.293         | 0.225 | 59                      | 0.75               | 1.05 | 0.77                | 1.10 |
| SWPA3010S5R6MT | 5.6±20%       | 0.322         | 0.248 | 40                      | 0.58               | 0.65 | 0.70                | 1.05 |
| SWPA3010S6R8MT | 6.8±20%       | 0.397         | 0.305 | 42                      | 0.55               | 0.72 | 0.66                | 0.96 |
| SWPA3010S8R2MT | 8.2±20%       | 0.520         | 0.40  | 23                      | 0.55               | 0.70 | 0.58                | 0.70 |
| SWPA3010S100MT | 10±20%        | 0.520         | 0.40  | 39                      | 0.55               | 0.75 | 0.58                | 0.70 |
| SWPA3010S120MT | 12±20%        | 0.657         | 0.505 | 36                      | 0.43               | 0.65 | 0.52                | 0.67 |
| SWPA3010S150MT | 15±20%        | 0.793         | 0.610 | 30                      | 0.42               | 0.57 | 0.47                | 0.57 |
| SWPA3010S220MT | 22±20%        | 1.209         | 0.930 | 28                      | 0.35               | 0.48 | 0.38                | 0.52 |
| SWPA3010S270MT | 27±20%        | 1.404         | 1.080 | 25                      | 0.30               | 0.45 | 0.35                | 0.50 |
| SWPA3010S330MT | 33±20%        | 2.015         | 1.550 | 18                      | 0.29               | 0.42 | 0.30                | 0.55 |
| SWPA3010S390MT | 39±20%        | 2.275         | 1.750 | 18                      | 0.28               | 0.38 | 0.28                | 0.53 |
| SWPA3010S430MT | 43±20%        | 2.340         | 1.80  | 18                      | 0.23               | 0.36 | 0.27                | 0.52 |
| SWPA3010S470MT | 47±20%        | 2.535         | 1.950 | 18                      | 0.22               | 0.35 | 0.26                | 0.52 |
| SWPA3010S510MT | 51±20%        | 2.860         | 2.20  | 18                      | 0.21               | 0.33 | 0.25                | 0.48 |
| SWPA3010S560MT | 56±20%        | 3.016         | 2.320 | 16                      | 0.21               | 0.28 | 0.24                | 0.35 |

## SWPA3012S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA3012SR22NT | 0.22±30%      | 0.022         | 0.017 | 321                     | 5.30               | 6.00 | 3.00                | 3.30 |
| SWPA3012SR82NT | 0.82±30%      | 0.039         | 0.030 | 180                     | 2.05               | 2.80 | 2.47                | 3.00 |
| SWPA3012S1R0NT | 1.0±30%       | 0.052         | 0.040 | 120                     | 1.87               | 2.80 | 2.20                | 2.70 |
| SWPA3012S1R2NT | 1.2±30%       | 0.059         | 0.045 | 120                     | 2.22               | 2.50 | 2.01                | 2.20 |
| SWPA3012S1R5NT | 1.5±30%       | 0.059         | 0.045 | 110                     | 1.62               | 1.90 | 2.01                | 2.20 |
| SWPA3012S1R8NT | 1.8±30%       | 0.082         | 0.063 | 90                      | 1.30               | 1.90 | 1.65                | 1.80 |
| SWPA3012S2R2NT | 2.2±30%       | 0.098         | 0.075 | 84                      | 1.20               | 1.90 | 1.55                | 1.70 |
| SWPA3012S2R4NT | 2.4±30%       | 0.088         | 0.068 | 100                     | 1.15               | 1.50 | 1.60                | 1.70 |
| SWPA3012S2R7MT | 2.7±20%       | 0.110         | 0.085 | 65                      | 1.14               | 1.50 | 1.48                | 1.50 |
| SWPA3012S3R3MT | 3.3±20%       | 0.130         | 0.10  | 64                      | 1.05               | 1.50 | 1.36                | 1.40 |
| SWPA3012S3R6MT | 3.6±20%       | 0.130         | 0.10  | 36                      | 1.05               | 1.50 | 1.36                | 1.40 |
| SWPA3012S3R9MT | 3.9±20%       | 0.189         | 0.145 | 61                      | 1.00               | 1.30 | 1.24                | 1.30 |
| SWPA3012S4R7MT | 4.7±20%       | 0.156         | 0.120 | 61                      | 0.90               | 1.00 | 1.24                | 1.30 |
| SWPA3012S6R8MT | 6.8±20%       | 0.247         | 0.190 | 61                      | 0.75               | 0.90 | 0.98                | 1.10 |
| SWPA3012S100MT | 10±20%        | 0.345         | 0.265 | 42                      | 0.60               | 0.88 | 0.83                | 0.90 |
| SWPA3012S120MT | 12±20%        | 0.449         | 0.345 | 32                      | 0.48               | 0.67 | 0.73                | 0.84 |
| SWPA3012S150MT | 15±20%        | 0.468         | 0.360 | 27                      | 0.45               | 0.62 | 0.71                | 0.77 |
| SWPA3012S180MT | 18±20%        | 0.709         | 0.545 | 25                      | 0.43               | 0.59 | 0.58                | 0.65 |
| SWPA3012S220MT | 22±20%        | 0.839         | 0.645 | 23                      | 0.42               | 0.52 | 0.53                | 0.59 |

## SPECIFICATIONS SWPA3012S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu$ H       | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA3012S270MT | 27 $\pm$ 20%  | 1.131         | 0.870 | 21                      | 0.35               | 0.48 | 0.47                | 0.51 |
| SWPA3012S330MT | 33 $\pm$ 20%  | 1.138         | 0.875 | 18                      | 0.36               | 0.46 | 0.46                | 0.50 |
| SWPA3012S360MT | 36 $\pm$ 20%  | 1.235         | 0.950 | 18                      | 0.34               | 0.44 | 0.44                | 0.48 |
| SWPA3012S390MT | 39 $\pm$ 20%  | 1.729         | 1.330 | 18                      | 0.30               | 0.39 | 0.37                | 0.41 |
| SWPA3012S470MT | 47 $\pm$ 20%  | 1.885         | 1.450 | 14                      | 0.27               | 0.35 | 0.35                | 0.40 |
| SWPA3012S560MT | 56 $\pm$ 20%  | 1.794         | 1.380 | 9                       | 0.26               | 0.33 | 0.28                | 0.40 |
| SWPA3012S680MT | 68 $\pm$ 20%  | 2.171         | 1.670 | 7                       | 0.24               | 0.29 | 0.33                | 0.37 |
| SWPA3012S820MT | 82 $\pm$ 20%  | 3.302         | 2.540 | 7                       | 0.17               | 0.27 | 0.27                | 0.31 |
| SWPA3012S101MT | 100 $\pm$ 20% | 3.718         | 2.860 | 5                       | 0.21               | 0.23 | 0.25                | 0.29 |

## SWPA3015S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu$ H       | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA3015SR50NT | 0.5 $\pm$ 30% | 0.039         | 0.030 | 162                     | 3.90               | 4.20 | 2.60                | 2.80 |
| SWPA3015S1R0NT | 1.0 $\pm$ 30% | 0.039         | 0.030 | 150                     | 2.32               | 2.80 | 2.35                | 2.50 |
| SWPA3015S1R2NT | 1.2 $\pm$ 30% | 0.052         | 0.040 | 110                     | 2.21               | 3.10 | 1.95                | 2.30 |
| SWPA3015S1R5NT | 1.5 $\pm$ 30% | 0.065         | 0.050 | 100                     | 2.30               | 2.70 | 1.70                | 2.20 |
| SWPA3015S1R8NT | 1.8 $\pm$ 30% | 0.065         | 0.050 | 92                      | 1.75               | 2.20 | 1.70                | 2.20 |
| SWPA3015S2R2NT | 2.2 $\pm$ 30% | 0.078         | 0.060 | 86                      | 1.60               | 2.00 | 1.60                | 2.00 |
| SWPA3015S2R7NT | 2.7 $\pm$ 30% | 0.098         | 0.075 | 64                      | 1.52               | 1.90 | 1.43                | 1.90 |
| SWPA3015S3R3MT | 3.3 $\pm$ 20% | 0.104         | 0.080 | 68                      | 1.32               | 1.81 | 1.36                | 1.60 |
| SWPA3015S3R6MT | 3.6 $\pm$ 20% | 0.137         | 0.105 | 59                      | 1.28               | 1.60 | 1.20                | 1.50 |
| SWPA3015S3R9MT | 3.9 $\pm$ 20% | 0.137         | 0.105 | 47                      | 1.20               | 1.40 | 1.20                | 1.50 |
| SWPA3015S4R3MT | 4.3 $\pm$ 20% | 0.150         | 0.115 | 53                      | 1.20               | 1.40 | 1.14                | 1.30 |
| SWPA3015S4R7MT | 4.7 $\pm$ 20% | 0.163         | 0.125 | 46                      | 1.10               | 1.40 | 1.09                | 1.30 |
| SWPA3015S5R1MT | 5.1 $\pm$ 20% | 0.173         | 0.133 | 49                      | 1.00               | 1.20 | 1.05                | 1.20 |
| SWPA3015S6R2MT | 6.2 $\pm$ 20% | 0.254         | 0.195 | 46                      | 1.00               | 1.20 | 0.86                | 1.00 |
| SWPA3015S6R8MT | 6.8 $\pm$ 20% | 0.260         | 0.20  | 39                      | 0.85               | 1.10 | 0.85                | 1.10 |
| SWPA3015S100MT | 10 $\pm$ 20%  | 0.325         | 0.250 | 41                      | 0.72               | 0.92 | 0.77                | 0.90 |
| SWPA3015S120MT | 12 $\pm$ 20%  | 0.416         | 0.320 | 32                      | 0.70               | 0.90 | 0.68                | 0.89 |
| SWPA3015S150MT | 15 $\pm$ 20%  | 0.455         | 0.350 | 30                      | 0.66               | 0.88 | 0.65                | 0.72 |
| SWPA3015S180MT | 18 $\pm$ 20%  | 0.559         | 0.430 | 23                      | 0.56               | 0.72 | 0.59                | 0.72 |
| SWPA3015S220MT | 22 $\pm$ 20%  | 0.598         | 0.460 | 23                      | 0.52               | 0.68 | 0.57                | 0.69 |
| SWPA3015S270MT | 27 $\pm$ 20%  | 0.949         | 0.730 | 22                      | 0.48               | 0.56 | 0.45                | 0.56 |
| SWPA3015S330MT | 33 $\pm$ 20%  | 1.066         | 0.820 | 20                      | 0.44               | 0.53 | 0.43                | 0.51 |
| SWPA3015S390MT | 39 $\pm$ 20%  | 1.294         | 0.995 | 14                      | 0.41               | 0.55 | 0.39                | 0.44 |
| SWPA3015S430MT | 43 $\pm$ 20%  | 1.378         | 1.060 | 16                      | 0.37               | 0.43 | 0.37                | 0.48 |
| SWPA3015S470MT | 47 $\pm$ 20%  | 1.625         | 1.250 | 14                      | 0.35               | 0.43 | 0.35                | 0.44 |
| SWPA3015S560MT | 56 $\pm$ 20%  | 1.664         | 1.280 | 13                      | 0.33               | 0.42 | 0.34                | 0.41 |
| SWPA3015S620MT | 62 $\pm$ 20%  | 2.093         | 1.610 | 13                      | 0.30               | 0.40 | 0.30                | 0.41 |
| SWPA3015S680MT | 68 $\pm$ 20%  | 3.510         | 2.700 | 11                      | 0.28               | 0.37 | 0.23                | 0.31 |
| SWPA3015S101MT | 100 $\pm$ 20% | 4.043         | 3.110 | 7.2                     | 0.23               | 0.25 | 0.21                | 0.25 |
| SWPA3015S151MT | 150 $\pm$ 20% | 4.940         | 3.80  | 4.5                     | 0.18               | 0.22 | 0.19                | 0.23 |



## SPECIFICATIONS SWPA4010S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz, 1V   | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | I <sub>rms</sub>    |      |
| SWPA4010S1R0NT | 1.0±30%       | 0.067         | 0.056 | 104                     | 2.00               | 2.30 | 1.90                | 2.40 |
| SWPA4010S1R5NT | 1.5±30%       | 0.084         | 0.070 | 71                      | 1.68               | 2.00 | 1.70                | 2.00 |
| SWPA4010S2R2MT | 2.2±20%       | 0.102         | 0.085 | 52                      | 1.20               | 1.50 | 1.50                | 2.00 |
| SWPA4010S3R3MT | 3.3±20%       | 0.120         | 0.100 | 42                      | 1.10               | 1.40 | 1.40                | 1.80 |
| SWPA4010S4R7MT | 4.7±20%       | 0.168         | 0.140 | 30                      | 0.95               | 1.10 | 1.20                | 1.50 |
| SWPA4010S6R8MT | 6.8±20%       | 0.240         | 0.200 | 26                      | 0.80               | 0.95 | 1.00                | 1.20 |
| SWPA4010S100MT | 10±20%        | 0.360         | 0.300 | 19                      | 0.62               | 0.75 | 0.75                | 1.00 |
| SWPA4010S150MT | 15±20%        | 0.516         | 0.430 | 17                      | 0.54               | 0.61 | 0.60                | 0.85 |
| SWPA4010S220MT | 22±20%        | 0.684         | 0.570 | 11                      | 0.45               | 0.52 | 0.50                | 0.75 |

## SWPA4012S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz, 1V   | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | I <sub>rms</sub>    |      |
| SWPA4012SR82NT | 0.82±30%      | 0.065         | 0.050 | 150                     | 3.02               | 3.30 | 1.65                | 2.50 |
| SWPA4012S1R0NT | 1.0±30%       | 0.065         | 0.050 | 120                     | 2.61               | 3.20 | 1.65                | 2.50 |
| SWPA4012S1R5NT | 1.5±30%       | 0.085         | 0.065 | 90                      | 2.10               | 2.70 | 1.46                | 2.20 |
| SWPA4012S1R8NT | 1.8±30%       | 0.104         | 0.080 | 88                      | 2.12               | 2.60 | 1.32                | 1.90 |
| SWPA4012S2R2NT | 2.2±30%       | 0.104         | 0.080 | 74                      | 1.76               | 2.30 | 1.32                | 1.90 |
| SWPA4012S2R7NT | 2.7±30%       | 0.117         | 0.090 | 71                      | 1.90               | 2.30 | 1.25                | 1.70 |
| SWPA4012S3R3NT | 3.3±30%       | 0.143         | 0.110 | 60                      | 1.72               | 2.10 | 1.12                | 1.60 |
| SWPA4012S3R6NT | 3.6±30%       | 0.143         | 0.110 | 57                      | 1.20               | 1.70 | 1.12                | 1.60 |
| SWPA4012S4R3NT | 4.3±30%       | 0.182         | 0.140 | 54                      | 1.58               | 1.70 | 1.00                | 1.50 |
| SWPA4012S4R7NT | 4.7±30%       | 0.163         | 0.125 | 50                      | 1.15               | 1.80 | 1.05                | 1.50 |
| SWPA4012S5R1NT | 5.1±30%       | 0.201         | 0.155 | 50                      | 1.55               | 1.60 | 0.95                | 1.50 |
| SWPA4012S5R6NT | 5.6±30%       | 0.182         | 0.140 | 42                      | 1.00               | 1.60 | 1.00                | 1.20 |
| SWPA4012S6R8MT | 6.8±20%       | 0.257         | 0.198 | 40                      | 0.85               | 1.40 | 0.84                | 1.20 |
| SWPA4012S100MT | 10±20%        | 0.345         | 0.265 | 33                      | 0.80               | 1.10 | 0.77                | 1.00 |
| SWPA4012S120MT | 12±20%        | 0.377         | 0.290 | 32                      | 0.66               | 1.00 | 0.70                | 0.95 |
| SWPA4012S150MT | 15±20%        | 0.442         | 0.340 | 25                      | 0.56               | 0.80 | 0.64                | 0.85 |
| SWPA4012S180MT | 18±20%        | 0.611         | 0.470 | 23                      | 0.55               | 0.75 | 0.55                | 0.80 |
| SWPA4012S220MT | 22±20%        | 0.763         | 0.587 | 20                      | 0.46               | 0.70 | 0.49                | 0.75 |
| SWPA4012S270MT | 27±20%        | 0.936         | 0.720 | 18                      | 0.50               | 0.70 | 0.45                | 0.60 |
| SWPA4012S330MT | 33±20%        | 1.053         | 0.810 | 17                      | 0.42               | 0.60 | 0.42                | 0.58 |
| SWPA4012S360MT | 36±20%        | 1.170         | 0.90  | 14                      | 0.40               | 0.50 | 0.40                | 0.56 |
| SWPA4012S390MT | 39±20%        | 1.430         | 1.10  | 16                      | 0.55               | 0.66 | 0.37                | 0.50 |
| SWPA4012S470MT | 47±20%        | 1.430         | 1.10  | 12                      | 0.35               | 0.50 | 0.37                | 0.50 |
| SWPA4012S560MT | 56±20%        | 1.625         | 1.250 | 11                      | 0.33               | 0.45 | 0.33                | 0.46 |
| SWPA4012S680MT | 68±20%        | 2.535         | 1.950 | 11                      | 0.38               | 0.45 | 0.27                | 0.45 |
| SWPA4012S820MT | 82±20%        | 2.782         | 2.140 | 11                      | 0.28               | 0.40 | 0.26                | 0.36 |
| SWPA4012S101MT | 100±20%       | 2.873         | 2.210 | 9.4                     | 0.25               | 0.30 | 0.25                | 0.35 |

## SPECIFICATIONS SWPA4018S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz, 1V   | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA4018SR47NT | 0.47±30%      | 0.018         | 0.014 | 155                     | 4.30               | 5.20 | 4.00                | 4.50 |
| SWPA4018SR68NT | 0.68±30%      | 0.026         | 0.020 | 128                     | 4.90               | 5.60 | 3.30                | 3.80 |
| SWPA4018S1R0NT | 1.0±30%       | 0.033         | 0.025 | 80                      | 4.80               | 5.20 | 2.00                | 3.30 |
| SWPA4018S1R5NT | 1.5±30%       | 0.039         | 0.030 | 65                      | 3.35               | 4.00 | 1.80                | 3.20 |
| SWPA4018S1R8NT | 1.8±30%       | 0.044         | 0.034 | 54                      | 3.00               | 3.40 | 2.00                | 2.80 |
| SWPA4018S2R2MT | 2.2±20%       | 0.059         | 0.045 | 52                      | 2.70               | 3.20 | 1.65                | 2.60 |
| SWPA4018S3R3MT | 3.3±20%       | 0.091         | 0.070 | 44                      | 2.45               | 2.90 | 1.23                | 2.10 |
| SWPA4018S4R7MT | 4.7±20%       | 0.117         | 0.090 | 34                      | 1.70               | 2.20 | 1.20                | 1.80 |
| SWPA4018S6R8MT | 6.8±20%       | 0.143         | 0.110 | 29                      | 1.45               | 2.00 | 1.06                | 1.50 |
| SWPA4018S100MT | 10±20%        | 0.234         | 0.180 | 24                      | 1.30               | 1.60 | 0.84                | 1.20 |
| SWPA4018S150MT | 15±20%        | 0.325         | 0.250 | 19                      | 0.94               | 1.10 | 0.65                | 1.00 |
| SWPA4018S220MT | 22±20%        | 0.468         | 0.360 | 16                      | 0.80               | 0.88 | 0.59                | 0.85 |
| SWPA4018S330MT | 33±20%        | 0.689         | 0.530 | 12                      | 0.56               | 0.75 | 0.49                | 0.72 |
| SWPA4018S470MT | 47±20%        | 0.845         | 0.650 | 10                      | 0.57               | 0.70 | 0.42                | 0.65 |
| SWPA4018S680MT | 68±20%        | 1.30          | 1.0   | 8.3                     | 0.47               | 0.51 | 0.32                | 0.52 |
| SWPA4018S101MT | 100±20%       | 2.275         | 1.750 | 6.5                     | 0.40               | 0.44 | 0.25                | 0.41 |
| SWPA4018S151MT | 150±20%       | 3.250         | 2.50  | 5.5                     | 0.31               | 0.34 | 0.22                | 0.36 |
| SWPA4018S221MT | 220±20%       | 5.20          | 4.0   | 4                       | 0.27               | 0.30 | 0.17                | 0.27 |

## SWPA4020S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz, 1V   | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA4020SR24MT | 0.24±20%      | 0.014         | 0.011 | 283                     | 10.5               | 12.5 | 4.50                | 5.20 |
| SWPA4020SR33NT | 0.33±30%      | 0.016         | 0.013 | 223                     | 7.50               | 8.50 | 3.30                | 4.90 |
| SWPA4020SR47NT | 0.47±30%      | 0.029         | 0.022 | 160                     | 7.00               | 7.50 | 3.30                | 3.70 |
| SWPA4020SR68NT | 0.68±30%      | 0.036         | 0.028 | 120                     | 6.40               | 6.60 | 2.80                | 3.30 |
| SWPA4020S1R0NT | 1.0±30%       | 0.038         | 0.029 | 75                      | 4.78               | 5.20 | 2.15                | 3.20 |
| SWPA4020S1R2NT | 1.2±30%       | 0.038         | 0.029 | 72                      | 5.10               | 5.60 | 2.15                | 3.20 |
| SWPA4020S1R5NT | 1.5±30%       | 0.046         | 0.035 | 71                      | 4.45               | 4.90 | 1.98                | 3.00 |
| SWPA4020S2R2NT | 2.2±30%       | 0.052         | 0.040 | 49                      | 3.40               | 3.70 | 1.85                | 2.80 |
| SWPA4020S3R3MT | 3.3±20%       | 0.091         | 0.070 | 44                      | 3.20               | 3.50 | 1.40                | 2.50 |
| SWPA4020S3R6MT | 3.6±20%       | 0.072         | 0.055 | 49                      | 2.80               | 3.00 | 1.54                | 2.50 |
| SWPA4020S4R7MT | 4.7±20%       | 0.098         | 0.075 | 42                      | 2.35               | 2.50 | 1.34                | 2.00 |
| SWPA4020S5R1MT | 5.1±20%       | 0.111         | 0.085 | 42                      | 2.30               | 2.50 | 1.27                | 1.80 |
| SWPA4020S5R6MT | 5.6±20%       | 0.117         | 0.090 | 30                      | 2.20               | 2.40 | 1.22                | 1.80 |
| SWPA4020S6R2MT | 6.2±20%       | 0.150         | 0.115 | 36                      | 2.15               | 2.30 | 1.08                | 1.60 |
| SWPA4020S6R8MT | 6.8±20%       | 0.163         | 0.125 | 33                      | 2.20               | 2.40 | 1.04                | 1.60 |
| SWPA4020S7R5MT | 7.5±20%       | 0.150         | 0.115 | 30                      | 1.85               | 2.00 | 1.08                | 1.50 |
| SWPA4020S8R2MT | 8.2±20%       | 0.163         | 0.125 | 27                      | 1.75               | 1.90 | 1.04                | 1.40 |
| SWPA4020S100MT | 10±20%        | 0.215         | 0.165 | 26                      | 1.60               | 1.70 | 0.90                | 1.20 |
| SWPA4020S120MT | 12±20%        | 0.228         | 0.175 | 26                      | 1.50               | 1.60 | 0.88                | 1.20 |
| SWPA4020S150MT | 15±20%        | 0.299         | 0.230 | 24                      | 1.35               | 1.50 | 0.77                | 1.10 |
| SWPA4020S220MT | 22±20%        | 0.455         | 0.350 | 15                      | 1.05               | 1.10 | 0.62                | 0.87 |
| SWPA4020S270MT | 27±20%        | 0.709         | 0.545 | 14                      | 1.02               | 1.10 | 0.50                | 0.70 |

## SPECIFICATIONS SWPA4020S Series

| Part Number    | Inductance  | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|-------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                |             | Max.          | Typ.  |                         | Min.               | Max. | Typ.                | Max. |
| Units          | @100kHz, 1V | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L           | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA4020S330MT | 33±20%      | 0.715         | 0.550 | 11                      | 0.85               | 0.93 | 0.49                | 0.68 |
| SWPA4020S390MT | 39±20%      | 0.845         | 0.650 | 11                      | 0.82               | 0.90 | 0.46                | 0.64 |
| SWPA4020S430MT | 43±20%      | 0.858         | 0.660 | 10                      | 0.77               | 0.85 | 0.45                | 0.63 |
| SWPA4020S470MT | 47±20%      | 0.923         | 0.710 | 10                      | 0.74               | 0.81 | 0.44                | 0.61 |
| SWPA4020S510MT | 51±20%      | 0.975         | 0.750 | 10                      | 0.70               | 0.77 | 0.42                | 0.59 |
| SWPA4020S560MT | 56±20%      | 1.040         | 0.80  | 10                      | 0.66               | 0.72 | 0.41                | 0.57 |
| SWPA4020S620MT | 62±20%      | 1.170         | 0.90  | 9.6                     | 0.65               | 0.71 | 0.39                | 0.52 |
| SWPA4020S680MT | 68±20%      | 1.380         | 1.060 | 7.7                     | 0.61               | 0.67 | 0.36                | 0.50 |
| SWPA4020S750MT | 75±20%      | 1.510         | 1.160 | 7.7                     | 0.70               | 0.77 | 0.35                | 0.49 |
| SWPA4020S820MT | 82±20%      | 1.520         | 1.170 | 7.2                     | 0.50               | 0.55 | 0.34                | 0.47 |
| SWPA4020S101MT | 100±20%     | 2.020         | 1.550 | 6.3                     | 0.48               | 0.53 | 0.31                | 0.43 |
| SWPA4020S221MT | 220±20%     | 5.460         | 4.200 | 5.0                     | 0.30               | 0.40 | 0.30                | 0.34 |

## SWPA4030S Series

| Part Number    | Inductance  | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|-------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                |             | Max.          | Typ.  |                         | Min.               | Max. | Typ.                | Max. |
| Units          | @100kHz, 1V | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L           | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA4030SR68NT | 0.68±30%    | 0.013         | 0.010 | 130                     | 6.80               | 8.00 | 4.56                | 5.10 |
| SWPA4030SR91NT | 0.91±30%    | 0.017         | 0.013 | 100                     | 6.25               | 6.80 | 4.15                | 4.70 |
| SWPA4030S1R0NT | 1.0±30%     | 0.018         | 0.014 | 70                      | 5.26               | 5.70 | 4.15                | 4.70 |
| SWPA4030S1R2NT | 1.2±30%     | 0.020         | 0.015 | 80                      | 5.80               | 6.30 | 3.82                | 4.20 |
| SWPA4030S1R5NT | 1.5±30%     | 0.026         | 0.020 | 62                      | 4.84               | 5.30 | 3.34                | 3.60 |
| SWPA4030S1R8NT | 1.8±30%     | 0.033         | 0.025 | 60                      | 4.50               | 5.00 | 3.20                | 3.30 |
| SWPA4030S2R2NT | 2.2±30%     | 0.039         | 0.030 | 52                      | 4.90               | 5.80 | 2.95                | 3.20 |
| SWPA4030S3R3MT | 3.3±20%     | 0.052         | 0.040 | 38                      | 3.30               | 3.60 | 2.40                | 2.60 |
| SWPA4030S3R9MT | 3.9±20%     | 0.074         | 0.057 | 32                      | 3.00               | 3.30 | 2.10                | 2.30 |
| SWPA4030S4R3MT | 4.3±20%     | 0.072         | 0.055 | 37                      | 2.95               | 3.20 | 2.10                | 2.30 |
| SWPA4030S4R7MT | 4.7±20%     | 0.078         | 0.060 | 31                      | 2.90               | 3.20 | 2.00                | 2.30 |
| SWPA4030S5R6MT | 5.6±20%     | 0.085         | 0.065 | 30                      | 2.60               | 2.80 | 1.95                | 2.10 |
| SWPA4030S6R8MT | 6.8±20%     | 0.117         | 0.090 | 24                      | 2.75               | 3.00 | 1.60                | 1.70 |
| SWPA4030S7R5MT | 7.5±20%     | 0.111         | 0.085 | 26                      | 2.20               | 2.40 | 1.65                | 1.80 |
| SWPA4030S8R2MT | 8.2±20%     | 0.117         | 0.090 | 26                      | 2.10               | 2.30 | 1.60                | 1.70 |
| SWPA4030S100MT | 10±20%      | 0.130         | 0.10  | 21                      | 1.95               | 2.40 | 1.50                | 1.60 |
| SWPA4030S120MT | 12±20%      | 0.176         | 0.135 | 18                      | 1.70               | 1.80 | 1.30                | 1.40 |
| SWPA4030S150MT | 15±20%      | 0.247         | 0.190 | 16                      | 1.65               | 1.80 | 1.11                | 1.20 |
| SWPA4030S180MT | 18±20%      | 0.260         | 0.20  | 10                      | 1.40               | 1.50 | 1.10                | 1.20 |
| SWPA4030S220MT | 22±20%      | 0.293         | 0.225 | 10                      | 1.30               | 1.40 | 1.00                | 1.20 |
| SWPA4030S330MT | 33±20%      | 0.429         | 0.330 | 10                      | 1.10               | 1.20 | 0.84                | 0.92 |
| SWPA4030S360MT | 36±20%      | 0.436         | 0.335 | 9.8                     | 1.05               | 1.10 | 0.83                | 0.91 |
| SWPA4030S390MT | 39±20%      | 0.566         | 0.435 | 10                      | 1.03               | 1.10 | 0.73                | 0.80 |
| SWPA4030S470MT | 47±20%      | 0.579         | 0.445 | 8.4                     | 0.95               | 1.00 | 0.72                | 0.80 |
| SWPA4030S510MT | 51±20%      | 0.611         | 0.470 | 8.4                     | 0.90               | 1.13 | 0.70                | 0.80 |
| SWPA4030S560MT | 56±20%      | 0.722         | 0.555 | 8.4                     | 0.85               | 0.94 | 0.65                | 0.71 |
| SWPA4030S620MT | 62±20%      | 0.760         | 0.585 | 7                       | 0.80               | 0.99 | 0.63                | 0.70 |
| SWPA4030S680MT | 68±20%      | 1.128         | 0.868 | 7                       | 0.72               | 0.80 | 0.52                | 0.57 |



**SPECIFICATIONS** SWPA4030S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | I <sub>rms</sub>    |      |
| SWPA4030S750MT | 75±20%        | 1.326         | 1.020 | 6.3                     | 0.70               | 0.88 | 0.48                | 0.53 |
| SWPA4030S820MT | 82±20%        | 1.378         | 1.060 | 5.6                     | 0.66               | 0.72 | 0.47                | 0.52 |
| SWPA4030S910MT | 91±20%        | 1.430         | 1.10  | 5.6                     | 0.65               | 0.71 | 0.46                | 0.50 |
| SWPA4030S101MT | 100±20%       | 1.495         | 1.150 | 5.6                     | 0.60               | 0.73 | 0.45                | 0.49 |
| SWPA4030S121MT | 120±20%       | 1.755         | 1.350 | 5.4                     | 0.55               | 0.60 | 0.42                | 0.46 |
| SWPA4030S151MT | 150±20%       | 2.340         | 1.80  | 4                       | 0.50               | 0.55 | 0.30                | 0.35 |
| SWPA4030S471KT | 470±10%       | 9.360         | 7.20  | 2                       | 0.30               | 0.35 | 0.20                | 0.23 |
| SWPA4030S501MT | 500±20%       | 9.027         | 6.944 | 2                       | 0.28               | 0.30 | 0.15                | 0.20 |
| SWPA4030S681MT | 680±20%       | 9.854         | 7.580 | 1.2                     | 0.19               | 0.20 | 0.14                | 0.18 |

## SWPA5012S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | I <sub>rms</sub>    |      |
| SWPA5012S1R0NT | 1.0±30%       | 0.068         | 0.057 | 103                     | 4.40               | 4.70 | 2.00                | 2.40 |
| SWPA5012S1R5NT | 1.5±30%       | 0.086         | 0.072 | 68                      | 3.70               | 3.80 | 1.90                | 2.20 |
| SWPA5012S2R2NT | 2.2±30%       | 0.108         | 0.090 | 50                      | 3.10               | 3.20 | 1.70                | 2.00 |
| SWPA5012S3R3NT | 3.3±30%       | 0.151         | 0.126 | 34                      | 2.40               | 2.60 | 1.40                | 1.70 |
| SWPA5012S4R7NT | 4.7±30%       | 0.197         | 0.164 | 31                      | 2.20               | 2.30 | 1.30                | 1.50 |
| SWPA5012S6R8MT | 6.8±20%       | 0.294         | 0.245 | 22                      | 1.70               | 1.90 | 1.00                | 1.20 |
| SWPA5012S100MT | 10±20%        | 0.413         | 0.344 | 17                      | 1.40               | 1.50 | 0.85                | 1.00 |
| SWPA5012S150MT | 15±20%        | 0.523         | 0.436 | 13                      | 1.20               | 1.30 | 0.80                | 0.92 |
| SWPA5012S220MT | 22±20%        | 0.858         | 0.780 | 16                      | 0.88               | 0.98 | 0.60                | 0.68 |

## SWPA5020S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |       | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|-------|---------------------|------|
|                | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ.  | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |       | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |       | I <sub>rms</sub>    |      |
| SWPA5020SR22NT | 0.22±30%      | 0.011         | 0.009 | 280                     | 9.00               | 12.00 | 5.30                | 6.00 |
| SWPA5020SR24NT | 0.24±30%      | 0.011         | 0.009 | 248                     | 8.00               | 10.00 | 5.30                | 6.00 |
| SWPA5020SR47NT | 0.47±30%      | 0.017         | 0.013 | 160                     | 6.15               | 6.70  | 4.60                | 5.00 |
| SWPA5020SR56NT | 0.56±30%      | 0.022         | 0.017 | 137                     | 8.50               | 9.60  | 3.80                | 4.20 |
| SWPA5020SR68NT | 0.68±30%      | 0.022         | 0.017 | 120                     | 5.50               | 6.00  | 4.00                | 4.40 |
| SWPA5020SR75NT | 0.75±30%      | 0.022         | 0.017 | 117                     | 5.50               | 6.00  | 4.00                | 4.40 |
| SWPA5020S1R0NT | 1.0±30%       | 0.026         | 0.020 | 114                     | 4.10               | 5.00  | 3.80                | 4.10 |
| SWPA5020S1R2NT | 1.2±30%       | 0.029         | 0.022 | 83                      | 4.50               | 4.90  | 3.55                | 3.90 |
| SWPA5020S1R5NT | 1.5±30%       | 0.034         | 0.026 | 68                      | 4.10               | 4.50  | 3.20                | 3.50 |
| SWPA5020S2R2NT | 2.2±30%       | 0.042         | 0.032 | 57                      | 3.20               | 4.00  | 2.90                | 3.10 |
| SWPA5020S2R7NT | 2.7±30%       | 0.049         | 0.038 | 52                      | 2.90               | 3.50  | 2.70                | 2.90 |
| SWPA5020S3R0NT | 3.0±30%       | 0.049         | 0.038 | 49                      | 2.55               | 2.80  | 2.70                | 2.90 |
| SWPA5020S3R3NT | 3.3±30%       | 0.056         | 0.043 | 46                      | 2.55               | 3.00  | 2.50                | 2.70 |
| SWPA5020S3R6NT | 3.6±30%       | 0.056         | 0.043 | 43                      | 2.80               | 3.00  | 2.50                | 2.70 |

## SPECIFICATIONS SWPA5020S Series

| Part Number    | Inductance | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu$ H    | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L          | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA5020S3R9NT | 3.9±30%    | 0.056         | 0.043 | 40                      | 2.30               | 2.80 | 2.50                | 2.70 |
| SWPA5020S4R3MT | 4.3±20%    | 0.074         | 0.057 | 37                      | 2.50               | 3.00 | 2.20                | 2.40 |
| SWPA5020S4R7MT | 4.7±20%    | 0.074         | 0.057 | 37                      | 2.50               | 2.70 | 2.20                | 2.40 |
| SWPA5020S5R1MT | 5.1±20%    | 0.083         | 0.064 | 32                      | 2.25               | 2.60 | 2.05                | 2.20 |
| SWPA5020S5R6MT | 5.6±20%    | 0.083         | 0.064 | 32                      | 2.30               | 2.50 | 2.05                | 2.20 |
| SWPA5020S6R8MT | 6.8±20%    | 0.108         | 0.083 | 30                      | 2.05               | 2.20 | 1.80                | 1.90 |
| SWPA5020S7R5MT | 7.5±20%    | 0.117         | 0.090 | 26                      | 1.85               | 2.00 | 1.75                | 1.90 |
| SWPA5020S8R2MT | 8.2±20%    | 0.127         | 0.098 | 26                      | 1.85               | 2.00 | 1.65                | 1.80 |
| SWPA5020S9R1MT | 9.1±20%    | 0.143         | 0.110 | 24                      | 1.70               | 1.80 | 1.55                | 1.70 |
| SWPA5020S100MT | 10±20%     | 0.143         | 0.110 | 24                      | 1.70               | 1.80 | 1.55                | 1.70 |
| SWPA5020S120MT | 12±20%     | 0.182         | 0.140 | 22                      | 1.50               | 1.60 | 1.40                | 1.50 |
| SWPA5020S150MT | 15±20%     | 0.215         | 0.165 | 20                      | 1.35               | 1.40 | 1.25                | 1.30 |
| SWPA5020S180MT | 18±20%     | 0.260         | 0.200 | 16                      | 1.25               | 1.30 | 1.15                | 1.20 |
| SWPA5020S220MT | 22±20%     | 0.294         | 0.226 | 14                      | 1.15               | 1.20 | 1.10                | 1.20 |
| SWPA5020S330MT | 33±20%     | 0.507         | 0.390 | 10                      | 0.92               | 1.00 | 0.90                | 0.99 |
| SWPA5020S470MT | 47±20%     | 0.680         | 0.523 | 7                       | 0.77               | 0.84 | 0.77                | 0.84 |
| SWPA5020S560MT | 56±20%     | 0.819         | 0.630 | 6                       | 0.77               | 0.84 | 0.70                | 0.77 |
| SWPA5020S680MT | 68±20%     | 0.962         | 0.740 | 6                       | 0.65               | 0.70 | 0.64                | 0.70 |
| SWPA5020S820MT | 82±20%     | 1.158         | 0.965 | 6                       | 0.65               | 0.75 | 0.50                | 0.60 |
| SWPA5020S101MT | 100±20%    | 1.430         | 1.100 | 6                       | 0.53               | 0.58 | 0.53                | 0.58 |
| SWPA5020S121MT | 120±20%    | 1.755         | 1.350 | 6                       | 0.42               | 0.53 | 0.40                | 0.50 |
| SWPA5020S201MT | 200±20%    | 2.60          | 2.00  | 4.5                     | 0.30               | 0.33 | 0.40                | 0.45 |

## SWPA5040S Series

| Part Number    | Inductance | DC Resistance |       | Self-resonant Frequency | Saturation Current |       | Heat Rating Current |      |
|----------------|------------|---------------|-------|-------------------------|--------------------|-------|---------------------|------|
|                | @100kHz,1V | Max.          | Typ.  | Min.                    | Max.               | Typ.  | Max.                | Typ. |
| Units          | $\mu$ H    | $\Omega$      |       | MHz                     | A                  |       | A                   |      |
| Symbol         | L          | DCR           |       | S.R.F                   | Isat               |       | Irms                |      |
| SWPA5040SR22MT | 0.22±20%   | 0.008         | 0.006 | 289                     | 18.00              | 20.00 | 6.50                | 7.50 |
| SWPA5040SR24NT | 0.24±30%   | 0.008         | 0.006 | 251                     | 15.70              | 18.00 | 6.40                | 7.40 |
| SWPA5040SR47MT | 0.47±20%   | 0.009         | 0.007 | 171                     | 10.00              | 11.50 | 6.60                | 7.60 |
| SWPA5040S1R0NT | 1.0±30%    | 0.016         | 0.012 | 117                     | 7.35               | 8.20  | 4.90                | 5.10 |
| SWPA5040S1R2NT | 1.2±30%    | 0.021         | 0.016 | 110                     | 6.50               | 7.10  | 4.15                | 4.30 |
| SWPA5040S1R5NT | 1.5±30%    | 0.020         | 0.015 | 86                      | 6.30               | 7.30  | 4.30                | 4.80 |
| SWPA5040S1R8MT | 1.8±20%    | 0.021         | 0.016 | 55                      | 5.50               | 6.40  | 4.15                | 4.30 |
| SWPA5040S2R2NT | 2.2±30%    | 0.025         | 0.019 | 50                      | 4.90               | 5.60  | 3.80                | 4.30 |
| SWPA5040S2R7NT | 2.7±30%    | 0.029         | 0.022 | 37                      | 4.30               | 5.10  | 3.60                | 4.10 |
| SWPA5040S3R0NT | 3.0±30%    | 0.029         | 0.022 | 37                      | 4.15               | 4.80  | 3.60                | 4.20 |
| SWPA5040S3R3NT | 3.3±30%    | 0.031         | 0.024 | 32                      | 3.95               | 4.60  | 3.40                | 3.90 |
| SWPA5040S3R6MT | 3.6±20%    | 0.031         | 0.026 | 30                      | 3.80               | 4.40  | 3.30                | 3.70 |
| SWPA5040S3R9NT | 3.9±30%    | 0.035         | 0.027 | 29                      | 3.55               | 4.20  | 3.20                | 3.70 |
| SWPA5040S4R7NT | 4.7±30%    | 0.039         | 0.030 | 28                      | 3.50               | 3.90  | 3.00                | 3.30 |
| SWPA5040S5R6MT | 5.6±20%    | 0.046         | 0.035 | 27                      | 3.00               | 4.10  | 2.80                | 3.10 |
| SWPA5040S6R8MT | 6.8±20%    | 0.056         | 0.043 | 21                      | 2.90               | 3.50  | 2.50                | 2.80 |
| SWPA5040S8R2MT | 8.2±20%    | 0.062         | 0.048 | 20                      | 2.70               | 3.00  | 2.30                | 2.60 |
| SWPA5040S100MT | 10±20%     | 0.083         | 0.064 | 18                      | 2.35               | 2.90  | 2.10                | 2.40 |

## SPECIFICATIONS SWPA5040S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA5040S120MT | 12±20%        | 0.100         | 0.077 | 14                      | 2.20               | 2.50 | 2.00                | 2.10 |
| SWPA5040S150MT | 15±20%        | 0.112         | 0.086 | 13                      | 2.00               | 2.30 | 2.00                | 2.10 |
| SWPA5040S180MT | 18±20%        | 0.155         | 0.119 | 12                      | 1.70               | 2.00 | 1.45                | 1.65 |
| SWPA5040S220MT | 22±20%        | 0.168         | 0.129 | 11                      | 1.60               | 1.90 | 1.50                | 1.60 |
| SWPA5040S270MT | 27±20%        | 0.244         | 0.188 | 9.8                     | 1.52               | 1.75 | 1.10                | 1.25 |
| SWPA5040S330MT | 33±20%        | 0.244         | 0.188 | 9                       | 1.30               | 1.50 | 1.20                | 1.40 |
| SWPA5040S470MT | 47±20%        | 0.354         | 0.272 | 7                       | 1.10               | 1.30 | 1.00                | 1.10 |
| SWPA5040S510MT | 51±20%        | 0.494         | 0.380 | 6                       | 1.00               | 1.20 | 1.00                | 1.10 |
| SWPA5040S560MT | 56±20%        | 0.494         | 0.380 | 6                       | 1.05               | 1.20 | 0.80                | 0.90 |
| SWPA5040S680MT | 68±20%        | 0.520         | 0.40  | 6                       | 0.90               | 1.10 | 0.80                | 0.90 |
| SWPA5040S750MT | 75±20%        | 0.585         | 0.450 | 6                       | 0.85               | 0.95 | 0.72                | 0.80 |
| SWPA5040S101MT | 100±20%       | 0.728         | 0.560 | 5                       | 0.75               | 0.90 | 0.70                | 0.80 |
| SWPA5040S151MT | 150±20%       | 0.975         | 0.750 | 3.7                     | 0.65               | 0.67 | 0.60                | 0.70 |
| SWPA5040S221MT | 220±20%       | 1.820         | 1.400 | 3.0                     | 0.48               | 0.55 | 0.40                | 0.50 |
| SWPA5040S301MT | 300±20%       | 2.600         | 2.000 | 2.7                     | 0.50               | 0.58 | 0.35                | 0.40 |
| SWPA5040S331MT | 330±20%       | 2.730         | 2.100 | 2.7                     | 0.42               | 0.47 | 0.40                | 0.50 |
| SWPA5040S471MT | 470±20%       | 3.900         | 3.000 | 2.7                     | 0.37               | 0.43 | 0.35                | 0.40 |
| SWPA5040S561MT | 560±20%       | 4.920         | 3.780 | 1.5                     | 0.31               | 0.36 | 0.31                | 0.35 |
| SWPA5040S681MT | 680±20%       | 5.070         | 3.900 | 1.60                    | 0.30               | 0.35 | 0.25                | 0.30 |

## SWPA5045S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA5045S2R2MT | 2.2±20%       | 0.029         | 0.022 | 50                      | 6.40               | 7.20 | 4.70                | 5.40 |
| SWPA5045S100MT | 10±20%        | 0.079         | 0.061 | 17                      | 3.20               | 3.70 | 2.50                | 2.90 |
| SWPA5045S220MT | 22±20%        | 0.163         | 0.125 | 10                      | 2.00               | 2.35 | 1.55                | 1.80 |

## SWPA6020S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA6020SR50NT | 0.50±30%      | 0.018         | 0.014 | 120                     | 4.50               | 6.00 | 4.00                | 5.00 |
| SWPA6020SR68NT | 0.68±30%      | 0.022         | 0.017 | 115                     | 6.55               | 7.80 | 3.80                | 4.80 |
| SWPA6020SR82NT | 0.82±30%      | 0.022         | 0.017 | 110                     | 5.30               | 6.30 | 3.80                | 4.80 |
| SWPA6020S1R0NT | 1.0±30%       | 0.026         | 0.020 | 100                     | 4.15               | 5.00 | 3.50                | 4.40 |
| SWPA6020S1R2NT | 1.2±30%       | 0.029         | 0.022 | 88                      | 5.90               | 7.00 | 3.20                | 4.00 |
| SWPA6020S1R5NT | 1.5±30%       | 0.029         | 0.022 | 79                      | 4.25               | 5.10 | 3.20                | 4.00 |
| SWPA6020S1R8NT | 1.8±30%       | 0.036         | 0.028 | 68                      | 4.85               | 5.80 | 2.75                | 3.50 |
| SWPA6020S2R0NT | 2.0±30%       | 0.046         | 0.035 | 65                      | 4.10               | 4.90 | 2.60                | 3.30 |

## SPECIFICATIONS SWPA6020S Series

| Part Number    | Inductance | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu$ H    | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L          | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA6020S2R2NT | 2.2±30%    | 0.036         | 0.028 | 61                      | 3.75               | 4.50 | 2.75                | 3.50 |
| SWPA6020S2R7NT | 2.7±30%    | 0.046         | 0.035 | 56                      | 3.90               | 4.60 | 2.60                | 3.30 |
| SWPA6020S3R3NT | 3.3±30%    | 0.046         | 0.035 | 51                      | 3.15               | 3.70 | 2.60                | 3.30 |
| SWPA6020S3R9NT | 3.9±30%    | 0.064         | 0.049 | 45                      | 3.25               | 3.90 | 2.10                | 2.60 |
| SWPA6020S4R3NT | 4.3±30%    | 0.064         | 0.049 | 44                      | 2.70               | 3.20 | 2.10                | 2.60 |
| SWPA6020S4R7NT | 4.7±30%    | 0.075         | 0.058 | 41                      | 3.00               | 3.60 | 2.00                | 2.50 |
| SWPA6020S5R6NT | 5.6±30%    | 0.075         | 0.058 | 36                      | 2.40               | 2.90 | 1.90                | 2.40 |
| SWPA6020S6R2NT | 6.2±30%    | 0.103         | 0.079 | 31                      | 2.30               | 2.70 | 1.80                | 2.30 |
| SWPA6020S6R8NT | 6.8±30%    | 0.103         | 0.079 | 31                      | 2.20               | 2.60 | 1.80                | 2.30 |
| SWPA6020S8R2NT | 8.2±30%    | 0.137         | 0.105 | 27                      | 2.10               | 2.50 | 1.40                | 1.80 |
| SWPA6020S100MT | 10±20%     | 0.137         | 0.105 | 27                      | 1.75               | 2.10 | 1.40                | 1.80 |
| SWPA6020S120MT | 12±20%     | 0.156         | 0.120 | 25                      | 1.45               | 1.70 | 1.30                | 1.60 |
| SWPA6020S150MT | 15±20%     | 0.189         | 0.145 | 21                      | 1.20               | 1.40 | 1.20                | 1.50 |
| SWPA6020S180MT | 18±20%     | 0.234         | 0.180 | 18                      | 1.20               | 1.40 | 1.08                | 1.40 |
| SWPA6020S220MT | 22±20%     | 0.265         | 0.204 | 16                      | 1.05               | 1.20 | 1.00                | 1.30 |
| SWPA6020S330MT | 33±20%     | 0.390         | 0.30  | 11                      | 0.95               | 1.10 | 0.84                | 1.05 |
| SWPA6020S470MT | 47±20%     | 0.559         | 0.430 | 10                      | 0.70               | 0.90 | 0.80                | 0.90 |
| SWPA6020S331MT | 330±20%    | 3.419         | 2.630 | 3                       | 0.27               | 0.33 | 0.33                | 0.39 |

## SWPA6028S Series

| Part Number    | Inductance | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu$ H    | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L          | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA6028SR82NT | 0.82±30%   | 0.016         | 0.012 | 97                      | 6.50               | 9.00 | 5.20                | 6.00 |
| SWPA6028S1R0NT | 1.0±30%    | 0.013         | 0.010 | 70                      | 5.75               | 7.00 | 5.20                | 5.70 |
| SWPA6028S1R2NT | 1.2±30%    | 0.017         | 0.013 | 69                      | 6.40               | 7.50 | 4.58                | 5.00 |
| SWPA6028S1R5NT | 1.5±30%    | 0.017         | 0.013 | 65                      | 6.00               | 6.60 | 4.58                | 5.00 |
| SWPA6028S2R2NT | 2.2±30%    | 0.026         | 0.020 | 48                      | 5.10               | 5.60 | 3.75                | 4.10 |
| SWPA6028S2R7NT | 2.7±30%    | 0.026         | 0.020 | 48                      | 3.80               | 4.10 | 3.75                | 4.10 |
| SWPA6028S3R3NT | 3.3±30%    | 0.033         | 0.025 | 41                      | 4.15               | 4.50 | 3.48                | 3.80 |
| SWPA6028S4R7NT | 4.7±30%    | 0.039         | 0.030 | 35                      | 3.00               | 3.30 | 3.08                | 3.40 |
| SWPA6028S5R1NT | 5.1±30%    | 0.056         | 0.043 | 32                      | 3.20               | 3.50 | 2.60                | 2.80 |
| SWPA6028S6R2MT | 6.2±20%    | 0.061         | 0.047 | 30                      | 3.05               | 3.30 | 2.40                | 2.60 |
| SWPA6028S6R8MT | 6.8±20%    | 0.061         | 0.047 | 27                      | 2.60               | 3.00 | 2.40                | 2.60 |
| SWPA6028S8R2MT | 8.2±20%    | 0.072         | 0.055 | 24                      | 2.30               | 2.50 | 2.25                | 2.50 |
| SWPA6028S9R1MT | 9.1±20%    | 0.096         | 0.074 | 24                      | 2.55               | 2.80 | 2.15                | 2.40 |
| SWPA6028S100MT | 10±20%     | 0.094         | 0.072 | 23                      | 2.04               | 2.50 | 1.95                | 2.40 |
| SWPA6028S120MT | 12±20%     | 0.104         | 0.080 | 18                      | 1.80               | 2.00 | 1.85                | 2.00 |
| SWPA6028S150MT | 15±20%     | 0.163         | 0.125 | 18                      | 1.75               | 1.90 | 1.45                | 1.60 |
| SWPA6028S180MT | 18±20%     | 0.156         | 0.120 | 15                      | 1.52               | 1.80 | 1.45                | 1.60 |
| SWPA6028S220MT | 22±20%     | 0.182         | 0.140 | 14                      | 1.45               | 1.80 | 1.40                | 1.60 |
| SWPA6028S270MT | 27±20%     | 0.202         | 0.155 | 13                      | 1.50               | 1.60 | 1.32                | 1.40 |
| SWPA6028S330MT | 33±20%     | 0.241         | 0.185 | 12                      | 1.35               | 1.50 | 1.22                | 1.30 |
| SWPA6028S360MT | 36±20%     | 0.280         | 0.215 | 11                      | 1.25               | 1.40 | 1.13                | 1.20 |
| SWPA6028S390MT | 39±20%     | 0.293         | 0.225 | 11                      | 1.25               | 1.40 | 1.10                | 1.20 |
| SWPA6028S470MT | 47±20%     | 0.410         | 0.315 | 9.5                     | 1.15               | 1.30 | 1.06                | 1.10 |
| SWPA6028S560MT | 56±20%     | 0.449         | 0.345 | 8.2                     | 1.05               | 1.20 | 0.89                | 1.00 |

## SPECIFICATIONS SWPA6028S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu$ H       | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA6028S680MT | 68 $\pm$ 20%  | 0.468         | 0.360 | 7.7                     | 0.80               | 0.95 | 0.86                | 0.95 |
| SWPA6028S750MT | 75 $\pm$ 20%  | 0.533         | 0.410 | 7.7                     | 0.90               | 0.99 | 0.81                | 0.90 |
| SWPA6028S820MT | 82 $\pm$ 20%  | 0.650         | 0.50  | 7.7                     | 0.80               | 0.88 | 0.70                | 0.77 |
| SWPA6028S101MT | 100 $\pm$ 20% | 0.650         | 0.50  | 7.1                     | 0.65               | 0.71 | 0.70                | 0.77 |
| SWPA6028S401MT | 400 $\pm$ 20% | 2.808         | 2.160 | 2.8                     | 0.30               | 0.33 | 0.40                | 0.45 |

## SWPA6045S Series

| Part Number    | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current |       | Heat Rating Current |      |
|----------------|----------------|---------------|-------|-------------------------|--------------------|-------|---------------------|------|
|                | @100kHz,1V     | Max.          | Typ.  | Min.                    | Max.               | Typ.  | Max.                | Typ. |
| Units          | $\mu$ H        | $\Omega$      |       | MHz                     | A                  |       | A                   |      |
| Symbol         | L              | DCR           |       | S.R.F                   | Isat               |       | Irms                |      |
| SWPA6045SR47NT | 0.47 $\pm$ 30% | 0.008         | 0.006 | 155                     | 15.00              | 16.50 | 6.50                | 6.60 |
| SWPA6045SR56NT | 0.56 $\pm$ 30% | 0.008         | 0.006 | 142                     | 14.00              | 15.00 | 6.50                | 6.60 |
| SWPA6045SR68NT | 0.68 $\pm$ 30% | 0.008         | 0.006 | 99                      | 11.00              | 12.00 | 5.70                | 6.50 |
| SWPA6045SR82NT | 0.82 $\pm$ 30% | 0.010         | 0.008 | 140                     | 10.35              | 11.00 | 5.90                | 6.50 |
| SWPA6045S1R0NT | 1.0 $\pm$ 30%  | 0.014         | 0.011 | 100                     | 9.85               | 10.00 | 5.14                | 5.60 |
| SWPA6045S1R2NT | 1.2 $\pm$ 30%  | 0.013         | 0.010 | 100                     | 8.35               | 9.10  | 5.40                | 5.90 |
| SWPA6045S1R3NT | 1.3 $\pm$ 30%  | 0.013         | 0.010 | 100                     | 8.35               | 9.10  | 5.40                | 5.90 |
| SWPA6045S1R5NT | 1.5 $\pm$ 30%  | 0.016         | 0.012 | 65                      | 8.80               | 9.70  | 4.95                | 5.40 |
| SWPA6045S1R8NT | 1.8 $\pm$ 30%  | 0.016         | 0.012 | 74                      | 7.60               | 8.40  | 4.95                | 5.40 |
| SWPA6045S2R2NT | 2.2 $\pm$ 30%  | 0.018         | 0.014 | 52                      | 6.75               | 7.40  | 4.60                | 5.00 |
| SWPA6045S2R3NT | 2.3 $\pm$ 30%  | 0.027         | 0.021 | 60                      | 6.00               | 6.60  | 3.50                | 3.80 |
| SWPA6045S2R7NT | 2.7 $\pm$ 30%  | 0.020         | 0.015 | 38                      | 5.75               | 6.30  | 4.30                | 4.70 |
| SWPA6045S3R0NT | 3.0 $\pm$ 30%  | 0.026         | 0.020 | 35                      | 5.60               | 6.20  | 3.80                | 4.20 |
| SWPA6045S3R3NT | 3.3 $\pm$ 30%  | 0.027         | 0.021 | 32                      | 5.90               | 6.20  | 3.70                | 4.00 |
| SWPA6045S3R6NT | 3.6 $\pm$ 30%  | 0.027         | 0.021 | 28                      | 5.25               | 5.70  | 3.70                | 4.00 |
| SWPA6045S4R3MT | 4.3 $\pm$ 20%  | 0.030         | 0.023 | 23                      | 4.45               | 4.90  | 3.50                | 3.80 |
| SWPA6045S4R5MT | 4.5 $\pm$ 20%  | 0.034         | 0.026 | 24                      | 4.97               | 5.50  | 3.30                | 3.60 |
| SWPA6045S4R7MT | 4.7 $\pm$ 20%  | 0.034         | 0.026 | 24                      | 4.97               | 5.50  | 3.30                | 3.60 |
| SWPA6045S5R1MT | 5.1 $\pm$ 20%  | 0.034         | 0.026 | 23                      | 4.40               | 4.80  | 3.30                | 3.60 |
| SWPA6045S5R6MT | 5.6 $\pm$ 20%  | 0.038         | 0.029 | 23                      | 4.15               | 4.60  | 3.15                | 3.40 |
| SWPA6045S6R2MT | 6.2 $\pm$ 20%  | 0.040         | 0.031 | 26                      | 4.43               | 4.80  | 3.00                | 3.30 |
| SWPA6045S6R3MT | 6.3 $\pm$ 20%  | 0.040         | 0.031 | 26                      | 4.43               | 4.70  | 3.00                | 3.30 |
| SWPA6045S6R8MT | 6.8 $\pm$ 20%  | 0.040         | 0.031 | 20                      | 3.90               | 4.30  | 3.00                | 3.30 |
| SWPA6045S7R5MT | 7.5 $\pm$ 20%  | 0.044         | 0.034 | 18                      | 3.50               | 3.80  | 2.90                | 3.20 |
| SWPA6045S8R2MT | 8.2 $\pm$ 20%  | 0.056         | 0.043 | 21                      | 3.90               | 4.30  | 2.60                | 2.80 |
| SWPA6045S9R1MT | 9.1 $\pm$ 20%  | 0.056         | 0.043 | 17                      | 3.35               | 3.70  | 2.60                | 2.80 |
| SWPA6045S100MT | 10 $\pm$ 20%   | 0.062         | 0.048 | 15                      | 3.20               | 3.50  | 2.45                | 2.70 |
| SWPA6045S120MT | 12 $\pm$ 20%   | 0.075         | 0.058 | 13                      | 2.80               | 3.00  | 2.20                | 2.40 |
| SWPA6045S150MT | 15 $\pm$ 20%   | 0.088         | 0.068 | 12                      | 2.50               | 2.70  | 2.05                | 2.20 |
| SWPA6045S180MT | 18 $\pm$ 20%   | 0.105         | 0.081 | 10                      | 2.20               | 2.40  | 1.85                | 2.00 |
| SWPA6045S220MT | 22 $\pm$ 20%   | 0.116         | 0.089 | 10                      | 2.05               | 2.20  | 1.80                | 2.00 |
| SWPA6045S270MT | 27 $\pm$ 20%   | 0.133         | 0.102 | 9.2                     | 1.90               | 2.10  | 1.65                | 1.80 |
| SWPA6045S300MT | 30 $\pm$ 20%   | 0.172         | 0.132 | 7.8                     | 1.70               | 1.80  | 1.50                | 1.60 |
| SWPA6045S330MT | 33 $\pm$ 20%   | 0.178         | 0.137 | 7.8                     | 1.65               | 1.80  | 1.45                | 1.60 |



## SPECIFICATIONS SWPA6045S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu$ H       | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA6045S360MT | 36 $\pm$ 20%  | 0.225         | 0.173 | 7.8                     | 1.62               | 1.80 | 1.40                | 1.50 |
| SWPA6045S390MT | 39 $\pm$ 20%  | 0.234         | 0.180 | 7.8                     | 1.50               | 1.60 | 1.25                | 1.40 |
| SWPA6045S430MT | 43 $\pm$ 20%  | 0.260         | 0.20  | 7.7                     | 1.63               | 1.80 | 1.20                | 1.30 |
| SWPA6045S470MT | 47 $\pm$ 20%  | 0.260         | 0.20  | 6.4                     | 1.40               | 1.50 | 1.20                | 1.30 |
| SWPA6045S510MT | 51 $\pm$ 20%  | 0.269         | 0.207 | 6.4                     | 1.35               | 1.50 | 1.15                | 1.20 |
| SWPA6045S560MT | 56 $\pm$ 20%  | 0.287         | 0.221 | 6.4                     | 1.30               | 1.40 | 1.10                | 1.20 |
| SWPA6045S620MT | 62 $\pm$ 20%  | 0.306         | 0.235 | 6.4                     | 1.25               | 1.40 | 1.10                | 1.20 |
| SWPA6045S680MT | 68 $\pm$ 20%  | 0.376         | 0.289 | 6.4                     | 1.20               | 1.30 | 1.00                | 1.10 |
| SWPA6045S750MT | 75 $\pm$ 20%  | 0.397         | 0.305 | 5                       | 1.15               | 1.20 | 0.95                | 1.00 |
| SWPA6045S820MT | 82 $\pm$ 20%  | 0.443         | 0.341 | 4.9                     | 1.05               | 1.10 | 0.90                | 0.99 |
| SWPA6045S910MT | 91 $\pm$ 20%  | 0.467         | 0.359 | 4.9                     | 1.00               | 1.10 | 0.85                | 0.94 |
| SWPA6045S101MT | 100 $\pm$ 20% | 0.563         | 0.433 | 4.2                     | 0.95               | 1.00 | 0.80                | 0.88 |
| SWPA6045S121MT | 120 $\pm$ 20% | 0.629         | 0.484 | 4.2                     | 0.85               | 0.94 | 0.77                | 0.85 |
| SWPA6045S151MT | 150 $\pm$ 20% | 0.754         | 0.580 | 4.2                     | 0.80               | 0.88 | 0.70                | 0.77 |
| SWPA6045S221MT | 220 $\pm$ 20% | 1.084         | 0.834 | 3.5                     | 0.70               | 0.77 | 0.59                | 0.65 |
| SWPA6045S331MT | 330 $\pm$ 20% | 1.651         | 1.270 | 2.8                     | 0.57               | 0.63 | 0.57                | 0.63 |
| SWPA6045S471MT | 470 $\pm$ 20% | 2.340         | 1.80  | 2.0                     | 0.50               | 0.56 | 0.42                | 0.48 |
| SWPA6045S681MT | 680 $\pm$ 20% | 3.250         | 2.50  | 1.7                     | 0.42               | 0.46 | 0.33                | 0.38 |

## SWPA8040S Series

| Part Number    | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current |       | Heat Rating Current |      |
|----------------|----------------|---------------|-------|-------------------------|--------------------|-------|---------------------|------|
|                | @100kHz,1V     | Max.          | Typ.  | Min.                    | Max.               | Typ.  | Max.                | Typ. |
| Units          | $\mu$ H        | $\Omega$      |       | MHz                     | A                  |       | A                   |      |
| Symbol         | L              | DCR           |       | S.R.F                   | Isat               |       | Irms                |      |
| SWPA8040SR82NT | 0.82 $\pm$ 30% | 0.010         | 0.008 | 94                      | 13.80              | 16.00 | 6.30                | 6.90 |
| SWPA8040S1R0NT | 1.0 $\pm$ 30%  | 0.010         | 0.008 | 89                      | 9.85               | 14.00 | 6.30                | 6.90 |
| SWPA8040S1R2NT | 1.2 $\pm$ 30%  | 0.013         | 0.010 | 59                      | 10.00              | 14.00 | 5.65                | 6.20 |
| SWPA8040S1R5NT | 1.5 $\pm$ 30%  | 0.013         | 0.010 | 67                      | 8.15               | 11.00 | 5.65                | 6.20 |
| SWPA8040S2R0NT | 2.0 $\pm$ 30%  | 0.016         | 0.012 | 43                      | 9.25               | 10.00 | 5.15                | 5.60 |
| SWPA8040S2R2NT | 2.2 $\pm$ 30%  | 0.016         | 0.012 | 41                      | 7.10               | 8.00  | 5.15                | 5.60 |
| SWPA8040S3R0NT | 3.0 $\pm$ 30%  | 0.018         | 0.014 | 32                      | 6.10               | 7.00  | 4.70                | 5.20 |
| SWPA8040S3R3NT | 3.3 $\pm$ 30%  | 0.022         | 0.017 | 27                      | 6.50               | 7.00  | 4.40                | 4.80 |
| SWPA8040S3R6NT | 3.6 $\pm$ 30%  | 0.022         | 0.017 | 30                      | 7.52               | 8.50  | 4.35                | 4.80 |
| SWPA8040S3R9NT | 3.9 $\pm$ 30%  | 0.022         | 0.017 | 26                      | 5.75               | 6.50  | 4.35                | 4.80 |
| SWPA8040S4R7NT | 4.7 $\pm$ 30%  | 0.025         | 0.019 | 24                      | 5.90               | 6.50  | 4.10                | 4.50 |
| SWPA8040S5R1NT | 5.1 $\pm$ 30%  | 0.025         | 0.019 | 22                      | 4.70               | 5.40  | 4.05                | 4.40 |
| SWPA8040S5R6NT | 5.6 $\pm$ 30%  | 0.027         | 0.021 | 24                      | 6.00               | 6.90  | 3.85                | 4.20 |
| SWPA8040S6R2NT | 6.2 $\pm$ 30%  | 0.027         | 0.021 | 20                      | 4.45               | 5.10  | 3.85                | 4.20 |
| SWPA8040S6R8MT | 6.8 $\pm$ 20%  | 0.031         | 0.024 | 20                      | 4.55               | 5.20  | 3.60                | 4.00 |
| SWPA8040S8R2MT | 8.2 $\pm$ 20%  | 0.034         | 0.026 | 17                      | 4.20               | 4.80  | 3.45                | 3.80 |
| SWPA8040S100MT | 10 $\pm$ 20%   | 0.038         | 0.029 | 15                      | 3.60               | 4.10  | 3.30                | 3.60 |
| SWPA8040S120MT | 12 $\pm$ 20%   | 0.053         | 0.041 | 13                      | 3.50               | 4.00  | 2.80                | 3.00 |
| SWPA8040S150MT | 15 $\pm$ 20%   | 0.061         | 0.047 | 12                      | 2.95               | 3.40  | 2.60                | 2.80 |
| SWPA8040S180MT | 18 $\pm$ 20%   | 0.069         | 0.053 | 11                      | 2.70               | 3.10  | 2.40                | 2.60 |
| SWPA8040S220MT | 22 $\pm$ 20%   | 0.090         | 0.069 | 9.5                     | 2.40               | 2.70  | 2.10                | 2.30 |
| SWPA8040S270MT | 27 $\pm$ 20%   | 0.101         | 0.078 | 9.2                     | 2.15               | 2.50  | 2.00                | 2.20 |
| SWPA8040S330MT | 33 $\pm$ 20%   | 0.126         | 0.097 | 7.8                     | 2.05               | 2.40  | 1.80                | 2.00 |

## SPECIFICATIONS SWPA8040S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA8040S360MT | 36±20%        | 0.133         | 0.102 | 7.8                     | 2.00               | 2.30 | 1.75                | 1.90 |
| SWPA8040S390MT | 39±20%        | 0.139         | 0.107 | 7.8                     | 1.95               | 2.20 | 1.70                | 1.90 |
| SWPA8040S430MT | 43±20%        | 0.147         | 0.113 | 7.8                     | 1.90               | 2.20 | 1.65                | 1.80 |
| SWPA8040S470MT | 47±20%        | 0.177         | 0.136 | 6.4                     | 1.75               | 2.00 | 1.55                | 1.70 |
| SWPA8040S510MT | 51±20%        | 0.185         | 0.142 | 6.4                     | 1.70               | 1.90 | 1.50                | 1.60 |
| SWPA8040S560MT | 56±20%        | 0.192         | 0.148 | 6.4                     | 1.55               | 1.70 | 1.45                | 1.60 |
| SWPA8040S620MT | 62±20%        | 0.237         | 0.182 | 6.4                     | 1.50               | 1.60 | 1.30                | 1.40 |
| SWPA8040S680MT | 68±20%        | 0.255         | 0.196 | 4.9                     | 1.45               | 1.60 | 1.25                | 1.40 |
| SWPA8040S750MT | 75±20%        | 0.274         | 0.211 | 4.9                     | 1.35               | 1.50 | 1.20                | 1.30 |
| SWPA8040S820MT | 82±20%        | 0.293         | 0.225 | 5.9                     | 1.30               | 1.40 | 1.15                | 1.20 |
| SWPA8040S910MT | 91±20%        | 0.354         | 0.272 | 4.9                     | 1.20               | 1.30 | 1.05                | 1.10 |
| SWPA8040S101MT | 100±20%       | 0.377         | 0.290 | 4.2                     | 1.15               | 1.30 | 1.00                | 1.10 |
| SWPA8040S121MT | 120±20%       | 0.434         | 0.334 | 3.5                     | 1.05               | 1.10 | 0.95                | 1.00 |
| SWPA8040S151MT | 150±20%       | 0.533         | 0.410 | 3.5                     | 1.10               | 1.20 | 0.85                | 0.94 |
| SWPA8040S181MT | 180±20%       | 0.676         | 0.520 | 3.5                     | 0.95               | 1.15 | 0.83                | 0.92 |
| SWPA8040S221MT | 220±20%       | 0.779         | 0.599 | 3.5                     | 0.85               | 0.94 | 0.80                | 0.88 |
| SWPA8040S331MT | 330±20%       | 1.156         | 0.889 | 2.8                     | 0.68               | 0.75 | 0.64                | 0.70 |
| SWPA8040S471MT | 470±20%       | 1.625         | 1.250 | 2.1                     | 0.60               | 0.70 | 0.50                | 0.60 |

## SWPA8060S Series

| Part Number       | Inductance    | DC Resistance |      | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|-------------------|---------------|---------------|------|-------------------------|--------------------|------|---------------------|------|
|                   | @100kHz,1V    | Max.          | Typ. | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units             | $\mu\text{H}$ | $\Omega$      |      | MHz                     | A                  |      | A                   |      |
| Symbol            | L             | DCR           |      | S.R.F                   | Isat               |      | Irms                |      |
| SWPA8060S681KTY01 | 680±10%       | 2.17          | 1.81 | 1.26                    | 0.72               | 0.82 | 0.46                | 0.53 |

## SWPA8065S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz,1V    | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA8065SR68MT | 0.68±20%      | 0.008         | 0.007 | 100                     | 24.0               | 26.0 | 7.50                | 8.50 |
| SWPA8065S1R0MT | 1.0±20%       | 0.011         | 0.008 | 96                      | 20.0               | 22.0 | 7.00                | 8.00 |
| SWPA8065S2R2MT | 2.2±20%       | 0.016         | 0.013 | 45                      | 13.8               | 12.0 | 5.20                | 4.50 |
| SWPA8065S3R3MT | 3.3±20%       | 0.018         | 0.015 | 27                      | 9.50               | 10.0 | 5.10                | 5.90 |
| SWPA8065S4R7MT | 4.7±20%       | 0.022         | 0.018 | 18                      | 8.50               | 9.50 | 4.70                | 5.40 |
| SWPA8065S5R6MT | 5.6±20%       | 0.026         | 0.022 | 17                      | 8.00               | 9.00 | 4.50                | 5.20 |
| SWPA8065S6R8MT | 6.8±20%       | 0.026         | 0.022 | 16                      | 7.50               | 8.00 | 4.50                | 5.20 |
| SWPA8065S8R2MT | 8.2±20%       | 0.031         | 0.026 | 15                      | 7.00               | 7.70 | 4.20                | 4.80 |
| SWPA8065S100MT | 10±20%        | 0.044         | 0.037 | 13                      | 8.00               | 8.90 | 3.20                | 3.70 |
| SWPA8065S150MT | 15±20%        | 0.053         | 0.044 | 10                      | 5.70               | 6.70 | 3.25                | 3.75 |
| SWPA8065S220MT | 22±20%        | 0.072         | 0.060 | 8                       | 4.30               | 4.80 | 2.70                | 3.10 |
| SWPA8065S470MT | 47±20%        | 0.152         | 0.127 | 7                       | 3.40               | 3.70 | 1.85                | 2.15 |
| SWPA8065S560MT | 56±20%        | 0.198         | 0.165 | 6                       | 3.20               | 3.70 | 1.35                | 1.55 |

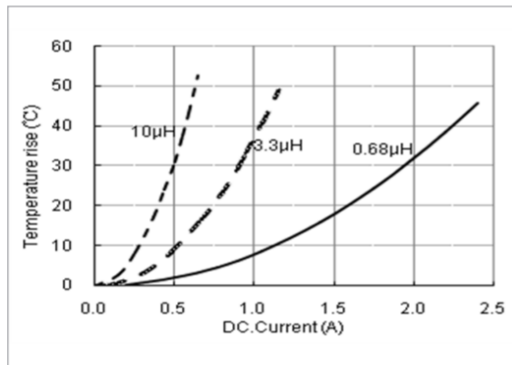
**SPECIFICATIONS** SWPA8065S Series

| Part Number    | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current |      | Heat Rating Current |      |
|----------------|---------------|---------------|-------|-------------------------|--------------------|------|---------------------|------|
|                | @100kHz, 1V   | Max.          | Typ.  | Min.                    | Max.               | Typ. | Max.                | Typ. |
| Units          | $\mu\text{H}$ | $\Omega$      |       | MHz                     | A                  |      | A                   |      |
| Symbol         | L             | DCR           |       | S.R.F                   | Isat               |      | Irms                |      |
| SWPA8065S680MT | 68 $\pm$ 20%  | 0.218         | 0.182 | 5                       | 2.70               | 3.20 | 1.55                | 1.80 |
| SWPA8065S101MT | 100 $\pm$ 20% | 0.280         | 0.233 | 3.1                     | 2.00               | 2.40 | 1.35                | 1.45 |
| SWPA8065S151MT | 150 $\pm$ 20% | 0.440         | 0.353 | 2.5                     | 1.60               | 2.00 | 0.95                | 1.10 |
| SWPA8065S221MT | 220 $\pm$ 20% | 0.656         | 0.547 | 2.0                     | 1.20               | 1.50 | 0.80                | 0.90 |
| SWPA8065S331MT | 330 $\pm$ 20% | 0.840         | 0.700 | 1.7                     | 1.00               | 1.20 | 0.75                | 0.85 |
| SWPA8065S471MT | 470 $\pm$ 20% | 1.560         | 1.300 | 1.4                     | 1.00               | 1.20 | 0.55                | 0.65 |
| SWPA8065S681MT | 680 $\pm$ 20% | 1.944         | 1.620 | 1                       | 0.85               | 1.00 | 0.52                | 0.60 |

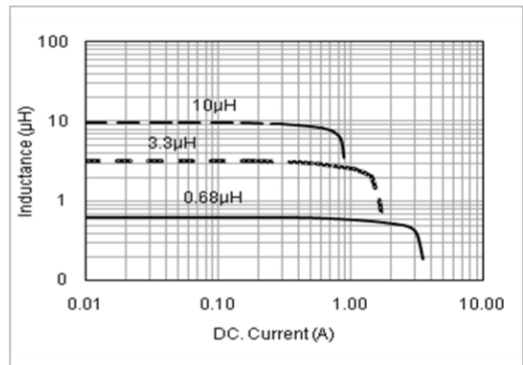
- ※1: All test data is referenced to 20°C ambient;
- ※2: Rated current: Isat or Irms, whichever is smaller;
- ※3: Isat: DC current at which the inductance drops approximate 30% from its value without current;
- ※4: Irms: DC current that causes the temperature rise ( $\Delta T=40^\circ\text{C}$ ) from 20°C ambient.

**TYPICAL ELECTRICAL CHARACTERISTICS**

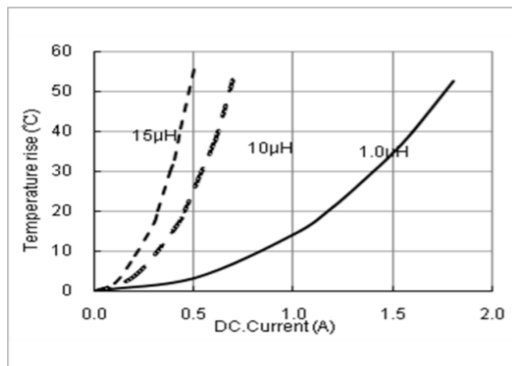
SWPA252010S Series  
Temperature vs. DC Current Characteristics



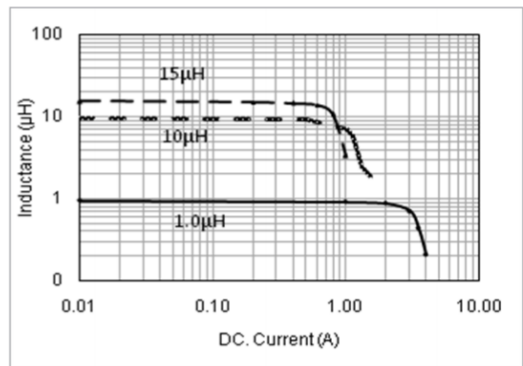
Inductance vs. DC Current Characteristics



SWPA252012S Series  
Temperature vs. DC Current Characteristics



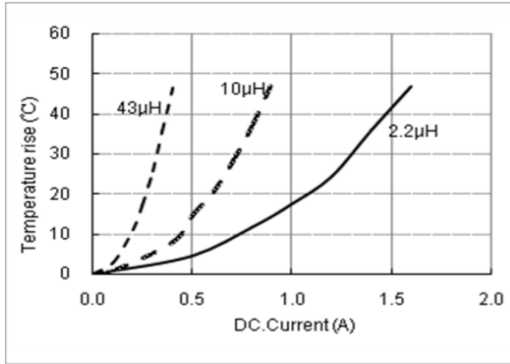
Inductance vs. DC Current Characteristics



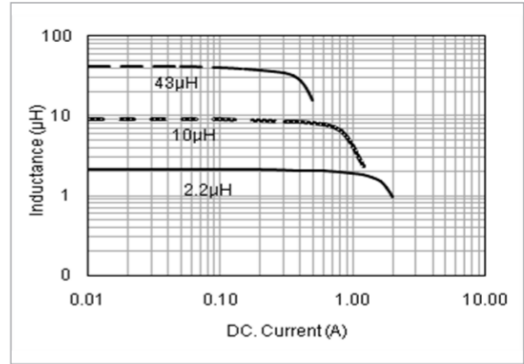
Multilayer Chip Ferrite Inductor  
 Multilayer Chip Inductor for Choke  
 Multilayer Chip Power Inductor  
 Multilayer Ultra High Q Chip Ceramic Inductor  
 High Q Chip Ceramic Inductor  
 Multilayer Chip Ceramic Inductor  
 Multilayer High Frequency Chip Ceramic Inductor  
 Wire Wound Chip Ceramic Inductor  
 Wire Wound Chip Ferrite Inductor  
 SMD Power Inductor

**TYPICAL ELECTRICAL CHARACTERISTICS**

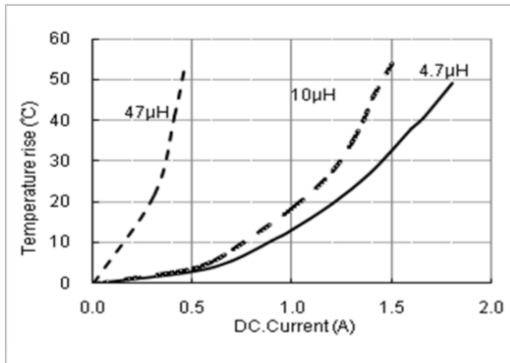
**SWPA3010S Series**  
Temperature vs. DC Current Characteristics



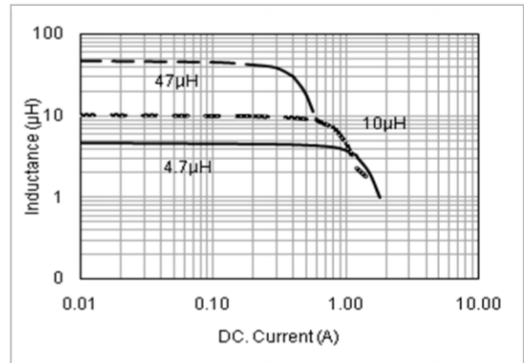
Inductance vs. DC Current Characteristics



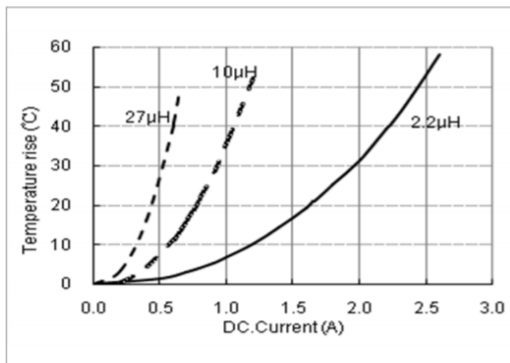
**SWPA3012S Series**  
Temperature vs. DC Current Characteristics



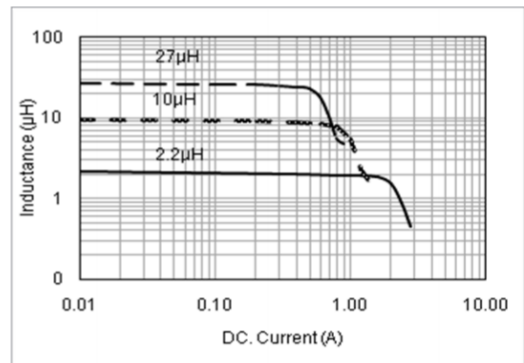
Inductance vs. DC Current Characteristics



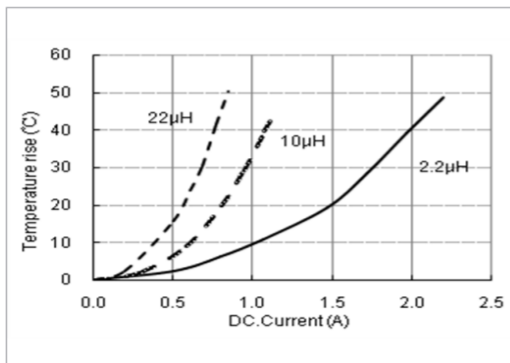
**SWPA3015S Series**  
Temperature vs. DC Current Characteristics



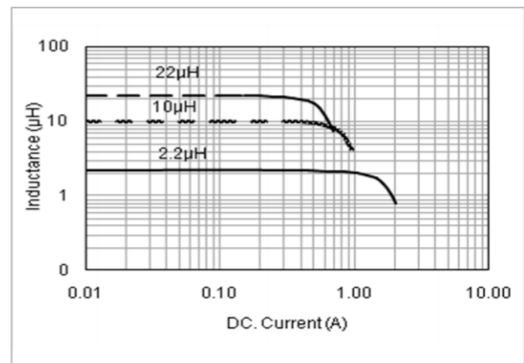
Inductance vs. DC Current Characteristics



**SWPA4010S Series**  
Temperature vs. DC Current Characteristics

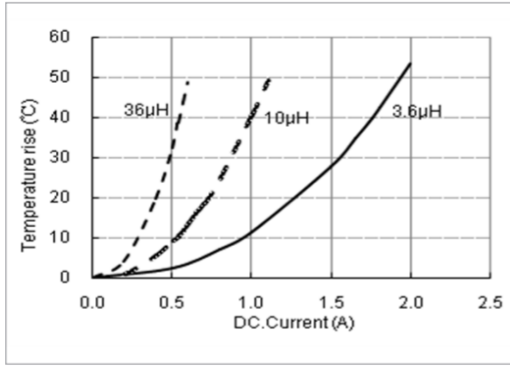


Inductance vs. DC Current Characteristics

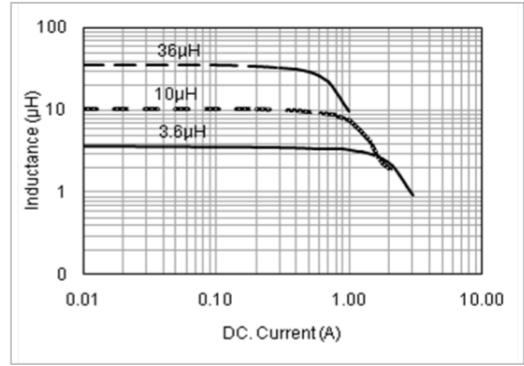


**TYPICAL ELECTRICAL CHARACTERISTICS**

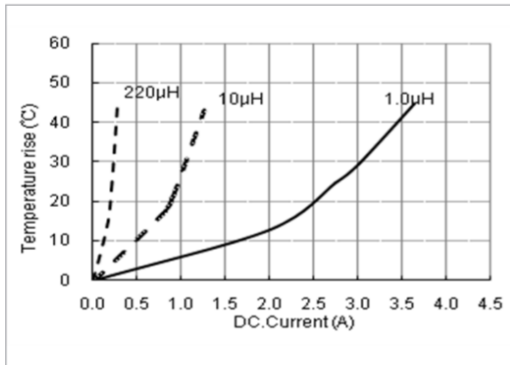
**SWPA4012S Series**  
Temperature vs. DC Current Characteristics



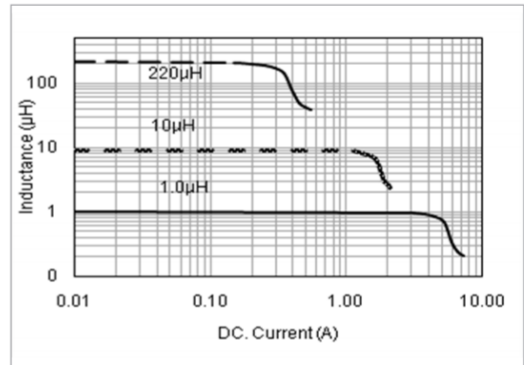
Inductance vs. DC Current Characteristics



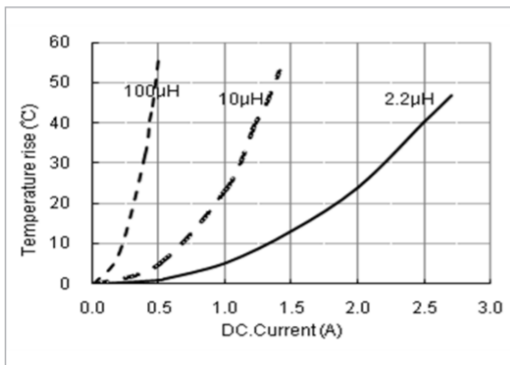
**SWPA4018S Series**  
Temperature vs. DC Current Characteristics



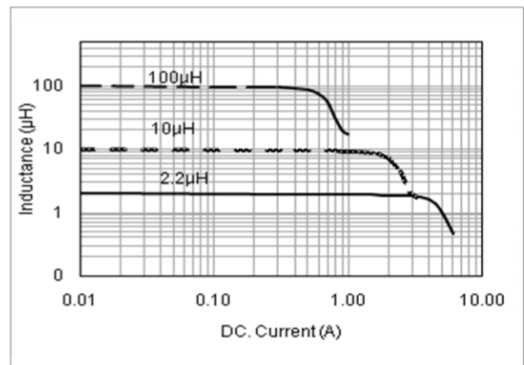
Inductance vs. DC Current Characteristics



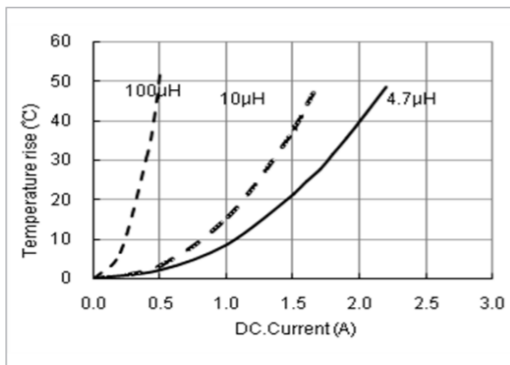
**SWPA4020S Series**  
Temperature vs. DC Current Characteristics



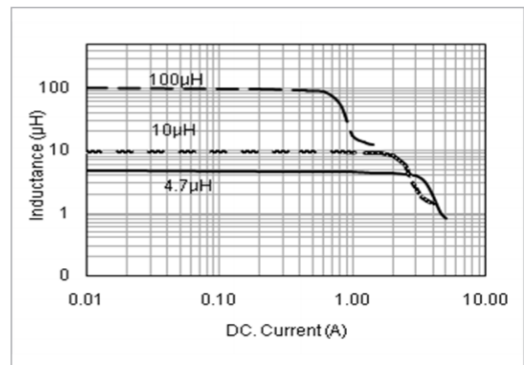
Inductance vs. DC Current Characteristics



**SWPA4030S Series**  
Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

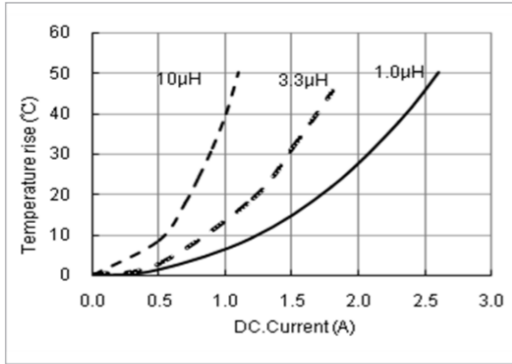


Multilayer Chip Ferrite Inductor  
Multilayer Chip Inductor for Choke  
Multilayer Chip Power Inductor  
Multilayer Ultra High Q Chip Ceramic Inductor  
High Q Chip Ceramic Inductor  
Multilayer Chip Ceramic Inductor  
Multilayer High Frequency Chip Ceramic Inductor  
Wire Wound Chip Ferrite Inductor  
Wire Wound Chip Ceramic Inductor  
SMD Power Inductor

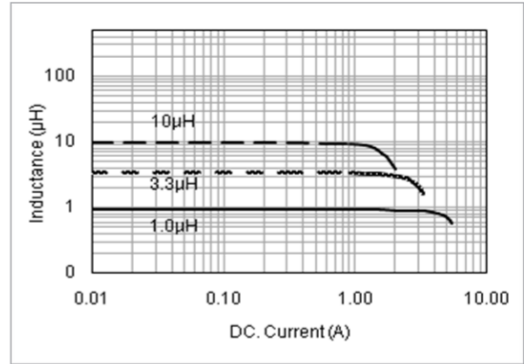


**TYPICAL ELECTRICAL CHARACTERISTICS**

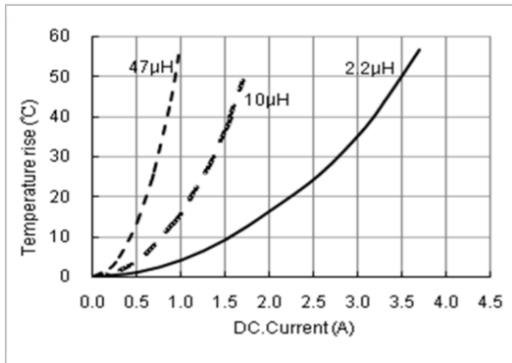
**SWPA5012S Series**  
Temperature vs. DC Current Characteristics



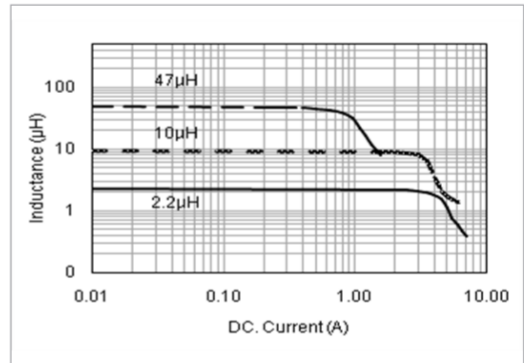
Inductance vs. DC Current Characteristics



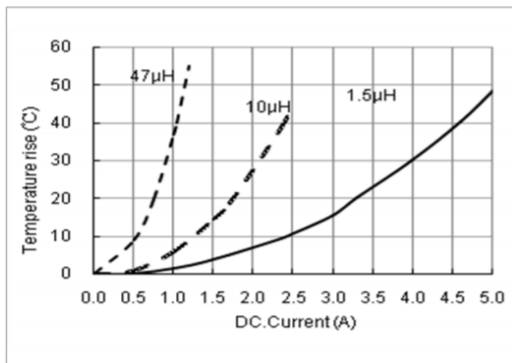
**SWPA5020S Series**  
Temperature vs. DC Current Characteristics



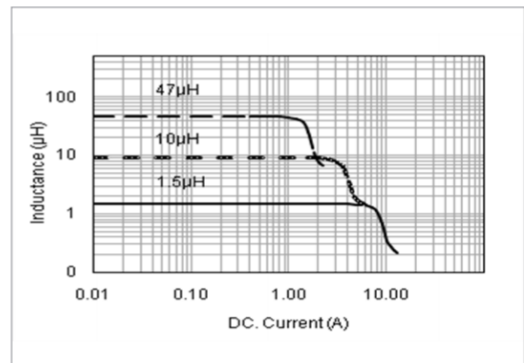
Inductance vs. DC Current Characteristics



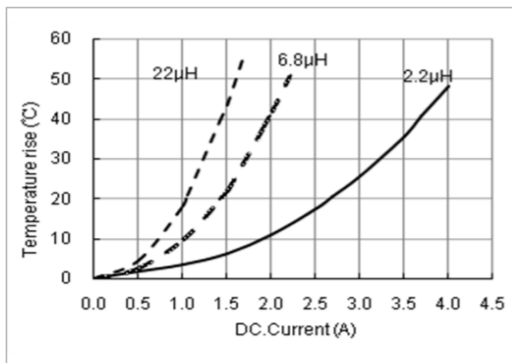
**SWPA5040S Series**  
Temperature vs. DC Current Characteristics



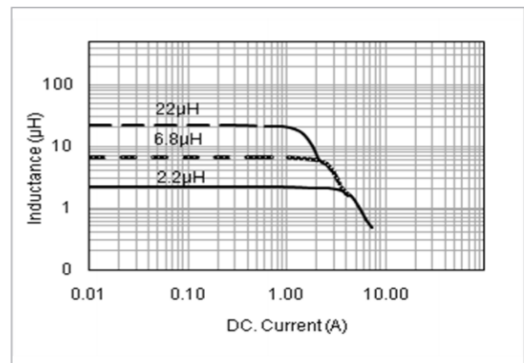
Inductance vs. DC Current Characteristics



**SWPA6020S Series**  
Temperature vs. DC Current Characteristics

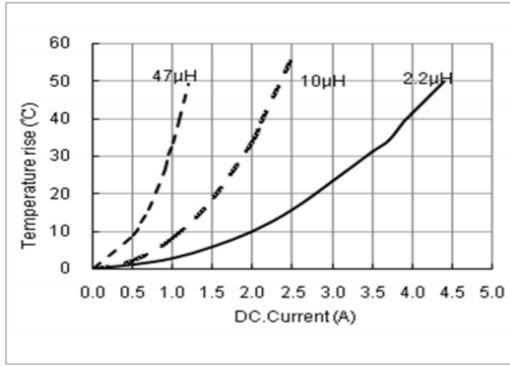


Inductance vs. DC Current Characteristics

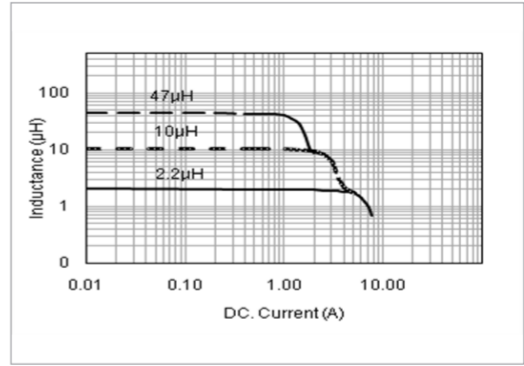


**TYPICAL ELECTRICAL CHARACTERISTICS**

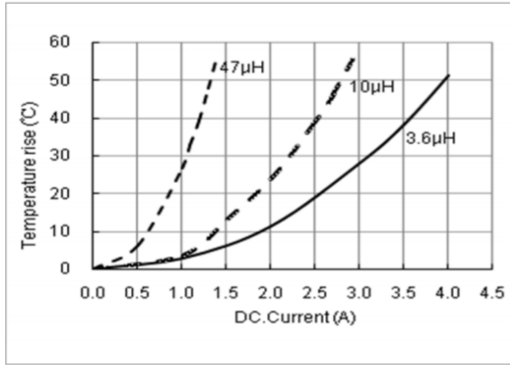
**SWPA6028S Series**  
Temperature vs. DC Current Characteristics



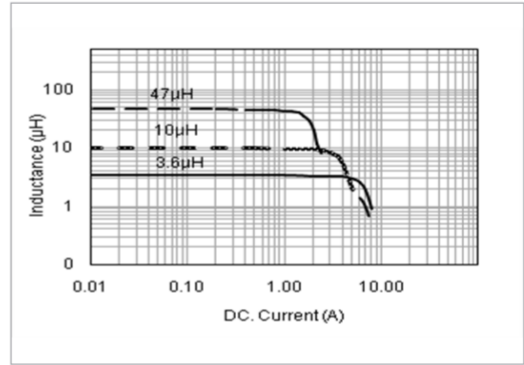
Inductance vs. DC Current Characteristics



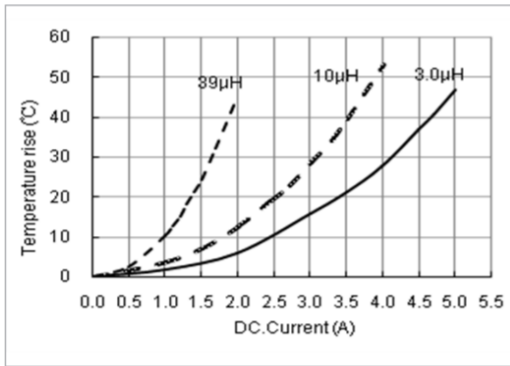
**SWPA6045S Series**  
Temperature vs. DC Current Characteristics



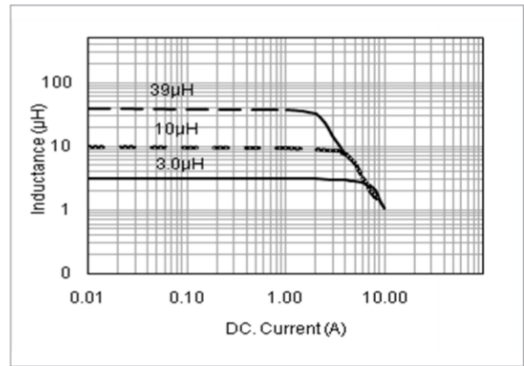
Inductance vs. DC Current Characteristics



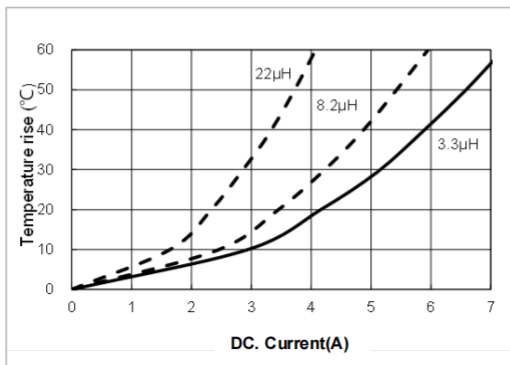
**SWPA8040S Series**  
Temperature vs. DC Current Characteristics



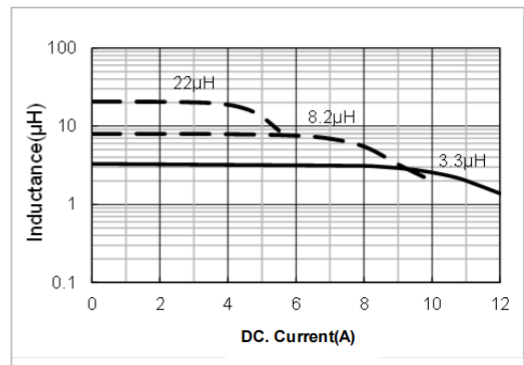
Inductance vs. DC Current Characteristics



**SWPA8065S Series**  
Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics



Multilayer Chip Ferrite Inductor  
Multilayer Chip Inductor for Choke  
Multilayer Chip Power Inductor  
Multilayer Ultra High Q Chip Ceramic Inductor  
High Q Chip Ceramic Inductor  
Multilayer Chip Ceramic Inductor  
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