

## Data Sheet

**Customer:**

**Product:** SMD Power Inductor – PCD Series

**Sizes.:** 0301/0302/0403/0502/0503/0504/0703/0705/1004/1005/1006

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## SMD Power Inductor



### Dimensions

| Type    | A (mm)   | B (mm)  | C (mm)   | H (mm) | I (mm) | J (mm) |
|---------|----------|---------|----------|--------|--------|--------|
| PCD0301 | 3.5±0.3  | 3.0±0.3 | 1.15±0.3 | 3.50   | 1.60   | 0.8    |
| PCD0302 | 3.5±0.3  | 3.0±0.3 | 2.1±0.3  | 3.50   | 1.60   | 0.8    |
| PCD0403 | 4.5±0.3  | 4.0±0.3 | 3.2±0.3  | 4.50   | 1.75   | 1.5    |
| PCD0502 | 5.8±0.3  | 5.2±0.3 | 2.5±0.3  | 5.50   | 2.15   | 1.7    |
| PCD0503 | 5.8±0.3  | 5.2±0.3 | 3.0±0.3  | 5.50   | 2.15   | 1.7    |
| PCD0504 | 5.8±0.3  | 5.2±0.3 | 4.5±0.3  | 5.50   | 2.15   | 1.7    |
| PCD0703 | 7.8±0.3  | 7.0±0.3 | 3.5±0.5  | 7.50   | 3.00   | 2.0    |
| PCD0705 | 7.8±0.3  | 7.0±0.3 | 5.0±0.5  | 7.50   | 3.00   | 2.0    |
| PCD1004 | 10.0±0.4 | 9.0±0.3 | 4.0±0.5  | 9.50   | 3.75   | 2.5    |
| PCD1005 | 10.0±0.4 | 9.0±0.3 | 5.4±0.5  | 9.50   | 3.75   | 2.5    |
| PCD1006 | 10.0±0.4 | 9.0±0.3 | 7.5 max. | 9.50   | 3.75   | 2.5    |

### Features

- High power, High saturation inductors
- Silver Plated Type, Low cost design
- Ideal inductors for DC-DC converters
- Available on tape and reel for auto surface mounting

### Applications

- Power Supply For VTRs.
- LCD Televisions
- Personal Computers
- Handheld Communication
- DC/DC Converters, etc.

### Characteristics

- Rated DC Current: The DC current when the inductance becomes 10% lower than its initial value or DC current when temperature of coil is increased to 40°C. (Ta=25°C). The smaller one is defined as Rated DC Current.
- Operating temperature range: -40 ~ 125°C

### Inductance and rated current ranges

- PCD0301 1.0~390μH 1.40~0.10A
- PCD0302 1.0~470μH 2.20~0.07A
- PCD0403 0.5~1000μH 3.00~0.109A
- PCD0502 1.0~1000μH 4.00~0.14A
- PCD0503 1.0~1000μH 4.50~0.13A
- PCD0504 0.6~3300μH 11.0~0.085A
- PCD0703 1.0~1000μH 1.64~0.20A
- PCD0705 1.0~1500μH 3.40~0.16A
- PCD1004 1.0~560μH 8.70~0.32A
- PCD1005 1.2~1000μH 8.63~0.20A
- PCD1006 1.0~1000μH 9.50~0.46A

– Test equipment:

L: HP4284A LCR meter

DCR: Milli-ohm meter

– Electrical specifications at 25°C

SMD Power Inductor

■ Product Identification

|              |   |                    |                  |                                       |
|--------------|---|--------------------|------------------|---------------------------------------|
| PCD          | 1005  | M                  | T                | 101                                   |
| Product Type | Dimensions (AxBxC)  | Inductor Tolerance | Packaging Style  | Inductance                            |
|              | 0301: 3.5x3.0x1.15<br>0302: 3.5x3.0x2.1<br>0403: 4.5x4.0x3.2<br>0502: 5.8x5.2x2.5<br>0503: 5.8x5.2x3.0<br>0504: 5.8x5.2x4.5<br>0703: 7.8x7.0x3.5<br>0705: 7.8x7.0x5.0<br>1004: 10x9.0x4.0<br>1005: 10x9.0x5.4<br>1006: 10x9.0x7.5 | K: ±10%<br>M: ±20% | T: Tape and Reel | 1R0: 1.0μH<br>470: 47μH<br>101: 100μH |

■ Electrical Characteristics

PCD0301 Type(□:Tolerance):

| Part No      | L (μH) | Tolerance | Test Condition | DCR (Ω) max. | IDC (A) max. |
|--------------|--------|-----------|----------------|--------------|--------------|
| PCD0301□T1R0 | 1.0    | M         | 100KHz, 0.25V  | 0.060        | 1.40         |
| PCD0301□T1R5 | 1.5    | M         | 100KHz, 0.25V  | 0.081        | 1.30         |
| PCD0301□T1R8 | 1.8    | M         | 100KHz, 0.25V  | 0.098        | 1.24         |
| PCD0301□T2R2 | 2.2    | M         | 100KHz, 0.25V  | 0.240        | 1.20         |
| PCD0301□T2R7 | 2.7    | M         | 100KHz, 0.25V  | 0.135        | 1.04         |
| PCD0301□T3R3 | 3.3    | M         | 100KHz, 0.25V  | 0.270        | 1.00         |
| PCD0301□T3R9 | 3.9    | M         | 100KHz, 0.25V  | 0.188        | 0.79         |
| PCD0301□T4R7 | 4.7    | M         | 100KHz, 0.25V  | 0.400        | 0.90         |
| PCD0301□T5R6 | 5.6    | M         | 100KHz, 0.25V  | 0.450        | 0.65         |
| PCD0301□T6R8 | 6.8    | M         | 100KHz, 0.25V  | 0.500        | 0.56         |
| PCD0301□T8R2 | 8.2    | M         | 100KHz, 0.25V  | 0.650        | 0.50         |
| PCD0301□T100 | 10     | M         | 1KHz, 0.25V    | 0.750        | 0.45         |
| PCD0301□T120 | 12     | M         | 1KHz, 0.25V    | 0.850        | 0.43         |
| PCD0301□T150 | 15     | M         | 1KHz, 0.25V    | 1.200        | 0.39         |
| PCD0301□T180 | 18     | M         | 1KHz, 0.25V    | 1.300        | 0.32         |
| PCD0301□T220 | 22     | M         | 1KHz, 0.25V    | 1.500        | 0.28         |
| PCD0301□T270 | 27     | M         | 1KHz, 0.25V    | 2.200        | 0.26         |
| PCD0301□T330 | 33     | M         | 1KHz, 0.25V    | 2.800        | 0.25         |
| PCD0301□T470 | 47     | M         | 1KHz, 0.25V    | 4.000        | 0.21         |
| PCD0301□T560 | 56     | M         | 1KHz, 0.25V    | 4.500        | 0.20         |
| PCD0301□T680 | 68     | M         | 1KHz, 0.25V    | 5.000        | 0.18         |
| PCD0301□T820 | 82     | M         | 1KHz, 0.25V    | 6.500        | 0.16         |
| PCD0301□T101 | 100    | M         | 1KHz, 0.25V    | 7.500        | 0.15         |
| PCD0301□T221 | 220    | M         | 1KHz, 0.25V    | 14.00        | 0.13         |
| PCD0301□T331 | 330    | M         | 1KHz, 0.25V    | 22.00        | 0.11         |
| PCD0301□T391 | 390    | M         | 1KHz, 0.25V    | 26.00        | 0.10         |

**■Electrical Characteristics**

PCD 0302 Type(□:Tolerance):

| Part No      | L<br>( $\mu$ H) | Tolerance | Test<br>Condition | DCR<br>( $\Omega$ ) max. | IDC<br>(A) max. |
|--------------|-----------------|-----------|-------------------|--------------------------|-----------------|
| PCD0302□T1R0 | 1.0             | M         | 100KHz, 0.25V     | 0.045                    | 2.200           |
| PCD0302□T1R2 | 1.2             | M         | 100KHz, 0.25V     | 0.050                    | 2.100           |
| PCD0302□T1R4 | 1.4             | M         | 100KHz, 0.25V     | 0.050                    | 2.000           |
| PCD0302□T1R5 | 1.5             | M         | 100KHz, 0.25V     | 0.055                    | 1.700           |
| PCD0302□T1R8 | 1.8             | M         | 100KHz, 0.25V     | 0.070                    | 1.650           |
| PCD0302□T2R2 | 2.2             | M         | 100KHz, 0.25V     | 0.085                    | 1.600           |
| PCD0302□T2R7 | 2.7             | M         | 100KHz, 0.25V     | 0.100                    | 1.400           |
| PCD0302□T3R3 | 3.3             | M         | 100KHz, 0.25V     | 0.120                    | 1.040           |
| PCD0302□T3R9 | 3.9             | M         | 100KHz, 0.25V     | 0.130                    | 1.000           |
| PCD0302□T4R7 | 4.7             | M         | 100KHz, 0.25V     | 0.170                    | 1.000           |
| PCD0302□T5R6 | 5.6             | M         | 100KHz, 0.25V     | 0.185                    | 0.950           |
| PCD0302□T6R8 | 6.8             | M         | 100KHz, 0.25V     | 0.200                    | 0.950           |
| PCD0302□T8R2 | 8.2             | M         | 100KHz, 0.25V     | 0.250                    | 0.900           |
| PCD0302□T100 | 10              | K, M      | 1KHz, 0.25V       | 0.320                    | 0.760           |
| PCD0302□T120 | 12              | K, M      | 1KHz, 0.25V       | 0.350                    | 0.685           |
| PCD0302□T150 | 15              | K, M      | 1KHz, 0.25V       | 0.460                    | 0.635           |
| PCD0302□T180 | 18              | K, M      | 1KHz, 0.25V       | 0.520                    | 0.525           |
| PCD0302□T220 | 22              | K, M      | 1KHz, 0.25V       | 0.660                    | 0.500           |
| PCD0302□T270 | 27              | K, M      | 1KHz, 0.25V       | 0.760                    | 0.405           |
| PCD0302□T330 | 33              | K, M      | 1KHz, 0.25V       | 0.920                    | 0.380           |
| PCD0302□T390 | 39              | K, M      | 1KHz, 0.25V       | 1.120                    | 0.355           |
| PCD0302□T470 | 47              | K, M      | 1KHz, 0.25V       | 1.270                    | 0.330           |
| PCD0302□T560 | 56              | K, M      | 1KHz, 0.25V       | 1.500                    | 0.290           |
| PCD0302□T680 | 68              | K, M      | 1KHz, 0.25V       | 2.000                    | 0.260           |
| PCD0302□T820 | 82              | K, M      | 1KHz, 0.25V       | 2.440                    | 0.230           |
| PCD0302□T101 | 100             | K, M      | 1KHz, 0.25V       | 2.850                    | 0.200           |
| PCD0302□T121 | 120             | K, M      | 1KHz, 0.25V       | 3.400                    | 0.180           |
| PCD0302□T151 | 150             | K, M      | 1KHz, 0.25V       | 4.470                    | 0.160           |
| PCD0302□T181 | 180             | K, M      | 1KHz, 0.25V       | 5.110                    | 0.150           |
| PCD0302□T221 | 220             | K, M      | 1KHz, 0.25V       | 7.310                    | 0.140           |
| PCD0302□T271 | 270             | K, M      | 1KHz, 0.25V       | 8.500                    | 0.100           |
| PCD0302□T331 | 330             | K, M      | 1KHz, 0.25V       | 10.19                    | 0.090           |
| PCD0302□T471 | 470             | K, M      | 1KHz, 0.25V       | 13.50                    | 0.070           |

**■Electrical Characteristics**

PCD0403 Type(□:Tolerance):

| Part No        | L<br>( $\mu$ H) | Tolerance | Test<br>Condition | DCR<br>( $\Omega$ ) max. | IDC<br>(A) max. |
|----------------|-----------------|-----------|-------------------|--------------------------|-----------------|
| PCD0403□TR50   | 0.5             | M         | 100KHz, 0.25V     | 0.020                    | 3.000           |
| PCD0403□T1R0   | 1.0             | M         | 100KHz, 0.25V     | 0.049                    | 2.700           |
| PCD0403□T1R0-1 | 1.0             | N         | 100KHz, 0.1V      | 0.049                    | 5.72            |
| PCD0403□T1R2   | 1.2             | M         | 100KHz, 0.25V     | 0.053                    | 2.540           |
| PCD0403□T1R4   | 1.4             | M         | 100KHz, 0.25V     | 0.056                    | 2.500           |
| PCD0403□T1R5   | 1.5             | M         | 100KHz, 0.25V     | 0.061                    | 2.240           |
| PCD0403□T1R8   | 1.8             | M         | 100KHz, 0.25V     | 0.064                    | 2.330           |
| PCD0403□T2R2   | 2.2             | M         | 100KHz, 0.25V     | 0.072                    | 2.250           |
| PCD0403□T2R2-2 | 2.2             | M         | 100KHz, 1V        | 0.047                    | 3.600           |
| PCD0403□T2R7   | 2.7             | M         | 100KHz, 0.25V     | 0.079                    | 2.160           |
| PCD0403□T3R3   | 3.3             | M         | 100KHz, 0.25V     | 0.086                    | 2.000           |
| PCD0403□T3R9   | 3.9             | M         | 100KHz, 0.25V     | 0.094                    | 1.840           |
| PCD0403□T4R7   | 4.7             | M         | 100KHz, 0.25V     | 0.109                    | 1.620           |
| PCD0403□T5R6   | 5.6             | M         | 100KHz, 0.25V     | 0.126                    | 1.480           |
| PCD0403□T6R8   | 6.8             | M         | 100KHz, 0.25V     | 0.131                    | 1.430           |
| PCD0403□T8R2   | 8.2             | M         | 100KHz, 0.25V     | 0.147                    | 1.370           |
| PCD0403□T100   | 10              | K, M      | 1KHz, 0.25V       | 0.182                    | 1.040           |
| PCD0403□T120   | 12              | K, M      | 1KHz, 0.25V       | 0.210                    | 0.970           |
| PCD0403□T150   | 15              | K, M      | 1KHz, 0.25V       | 0.235                    | 0.850           |
| PCD0403□T150-2 | 15              | M         | 1KHz, 0.25V       | 0.235                    | 1.200           |
| PCD0403□T180   | 18              | K, M      | 1KHz, 0.25V       | 0.338                    | 0.740           |
| PCD0403□T220   | 22              | K, M      | 1KHz, 0.25V       | 0.378                    | 0.680           |
| PCD0403□T270   | 27              | K, M      | 1KHz, 0.25V       | 0.522                    | 0.620           |
| PCD0403□T330   | 33              | K, M      | 1KHz, 0.25V       | 0.540                    | 0.560           |
| PCD0403□T390   | 39              | K, M      | 1KHz, 0.25V       | 0.587                    | 0.520           |
| PCD0403□T470   | 47              | K, M      | 1KHz, 0.25V       | 0.844                    | 0.440           |
| PCD0403□T560   | 56              | K, M      | 1KHz, 0.25V       | 0.937                    | 0.420           |
| PCD0403□T680   | 68              | K, M      | 1KHz, 0.25V       | 1.117                    | 0.370           |
| PCD0403□T820   | 82              | K, M      | 1KHz, 0.25V       | 1.140                    | 0.340           |
| PCD0403□T101   | 100             | K, M      | 1KHz, 0.25V       | 1.190                    | 0.300           |
| PCD0403□T121   | 120             | K, M      | 1KHz, 0.25V       | 1.400                    | 0.256           |
| PCD0403□T151   | 150             | K, M      | 1KHz, 0.25V       | 1.800                    | 0.212           |
| PCD0403□T181   | 180             | K, M      | 1KHz, 0.25V       | 1.920                    | 0.200           |
| PCD0403□T221   | 220             | K, M      | 1KHz, 0.25V       | 2.030                    | 0.180           |
| PCD0403□T271   | 270             | K, M      | 1KHz, 0.25V       | 2.890                    | 0.174           |
| PCD0403□T331   | 330             | K, M      | 1KHz, 0.25V       | 3.760                    | 0.168           |
| PCD0403□T391   | 390             | K, M      | 1KHz, 0.25V       | 4.260                    | 0.160           |
| PCD0403□T471   | 470             | K, M      | 1KHz, 0.25V       | 5.140                    | 0.158           |
| PCD0403□T561   | 560             | K, M      | 1KHz, 0.25V       | 6.370                    | 0.148           |
| PCD0403□T681   | 680             | K, M      | 1KHz, 0.25V       | 9.240                    | 0.128           |
| PCD0403□T821   | 820             | K, M      | 1KHz, 0.25V       | 13.40                    | 0.110           |
| PCD0403□T102   | 1000            | K, M      | 1KHz, 0.25V       | 15.60                    | 0.109           |
| PCD0403□T102-2 | 1000            | K         | 1KHz, 0.25V       | 14.00                    | 0.130           |

Note: PCD0403□T2R2-2 The DC current when the inductance becomes 30% lower than its initial value

PCD0403□T102-2 The DC current when the inductance becomes 35% lower than its initial value

**■Electrical Characteristics**

PCD0502 Type(□:Tolerance):

| Part No      | L<br>( $\mu$ H) | Tolerance | Test<br>Condition | DCR<br>( $\Omega$ ) max. | IDC<br>(A) max. |
|--------------|-----------------|-----------|-------------------|--------------------------|-----------------|
| PCD0502□T1R0 | 1.0             | M         | 100KHz, 0.25V     | 0.021                    | 4.000           |
| PCD0502□T1R2 | 1.2             | M         | 100KHz, 0.25V     | 0.050                    | 4.200           |
| PCD0502□T1R5 | 1.5             | M         | 100KHz, 0.25V     | 0.060                    | 4.000           |
| PCD0502□T1R8 | 1.8             | M         | 100KHz, 0.25V     | 0.065                    | 3.700           |
| PCD0502□T2R2 | 2.2             | M         | 100KHz, 0.25V     | 0.070                    | 3.500           |
| PCD0502□T2R7 | 2.7             | M         | 100KHz, 0.25V     | 0.080                    | 3.200           |
| PCD0502□T3R3 | 3.3             | M         | 100KHz, 0.25V     | 0.100                    | 2.700           |
| PCD0502□T3R9 | 3.9             | M         | 100KHz, 0.25V     | 0.120                    | 2.400           |
| PCD0502□T4R7 | 4.7             | M         | 100KHz, 0.25V     | 0.140                    | 2.000           |
| PCD0502□T5R6 | 5.6             | M         | 100KHz, 0.25V     | 0.150                    | 1.800           |
| PCD0502□T6R8 | 6.8             | M         | 100KHz, 0.25V     | 0.160                    | 1.500           |
| PCD0502□T8R2 | 8.2             | M         | 100KHz, 0.25V     | 0.170                    | 1.400           |
| PCD0502□T100 | 10              | K, M      | 1KHz, 0.25V       | 0.200                    | 1.300           |
| PCD0502□T120 | 12              | K, M      | 1KHz, 0.25V       | 0.230                    | 1.100           |
| PCD0502□T150 | 15              | K, M      | 1KHz, 0.25V       | 0.250                    | 1.050           |
| PCD0502□T180 | 18              | K, M      | 1KHz, 0.25V       | 0.300                    | 1.000           |
| PCD0502□T220 | 22              | K, M      | 1KHz, 0.25V       | 0.350                    | 0.900           |
| PCD0502□T270 | 27              | K, M      | 1KHz, 0.25V       | 0.400                    | 0.850           |
| PCD0502□T330 | 33              | K, M      | 1KHz, 0.25V       | 0.500                    | 0.750           |
| PCD0502□T390 | 39              | K, M      | 1KHz, 0.25V       | 0.550                    | 0.700           |
| PCD0502□T470 | 47              | K, M      | 1KHz, 0.25V       | 0.650                    | 0.600           |
| PCD0502□T560 | 56              | K, M      | 1KHz, 0.25V       | 0.760                    | 0.550           |
| PCD0502□T680 | 68              | K, M      | 1KHz, 0.25V       | 0.950                    | 0.500           |
| PCD0502□T820 | 82              | K, M      | 1KHz, 0.25V       | 1.200                    | 0.450           |
| PCD0502□T101 | 100             | K, M      | 1KHz, 0.25V       | 1.400                    | 0.400           |
| PCD0502□T121 | 120             | K, M      | 1KHz, 0.25V       | 1.750                    | 0.350           |
| PCD0502□T151 | 150             | K, M      | 1KHz, 0.25V       | 2.000                    | 0.250           |
| PCD0502□T181 | 180             | K, M      | 1KHz, 0.25V       | 2.600                    | 0.250           |
| PCD0502□T221 | 220             | K, M      | 1KHz, 0.25V       | 3.000                    | 0.200           |
| PCD0502□T271 | 270             | K, M      | 1KHz, 0.25V       | 3.700                    | 0.180           |
| PCD0502□T331 | 330             | K, M      | 1KHz, 0.25V       | 4.300                    | 0.170           |
| PCD0502□T391 | 390             | K, M      | 1KHz, 0.25V       | 6.000                    | 0.160           |
| PCD0502□T471 | 470             | K, M      | 1KHz, 0.25V       | 6.700                    | 0.150           |
| PCD0502□T102 | 1000            | K, M      | 1KHz, 0.25V       | 15.00                    | 0.140           |

**■Electrical Characteristics**

PCD0503 Type(□:Tolerance):

| Part No        | L<br>( $\mu$ H) | Tolerance | Test<br>Condition | DCR<br>( $\Omega$ ) max. | IDC<br>(A) max. |
|----------------|-----------------|-----------|-------------------|--------------------------|-----------------|
| PCD0503□T1R0   | 1.0             | M         | 100KHz, 0.25V     | 0.03                     | 4.50            |
| PCD0503□T1R2   | 1.2             | M         | 100KHz, 0.25V     | 0.03                     | 4.20            |
| PCD0503□T1R5   | 1.5             | M         | 100KHz, 0.25V     | 0.03                     | 4.10            |
| PCD0503□T1R8   | 1.8             | M         | 100KHz, 0.25V     | 0.03                     | 3.70            |
| PCD0503□T2R2   | 2.2             | M         | 100KHz, 0.25V     | 0.03                     | 3.50            |
| PCD0503□T2R7   | 2.7             | M         | 100KHz, 0.25V     | 0.04                     | 3.20            |
| PCD0503□T3R3   | 3.3             | M         | 100KHz, 0.25V     | 0.05                     | 2.80            |
| PCD0503□T3R9   | 3.9             | M         | 100KHz, 0.25V     | 0.06                     | 2.60            |
| PCD0503□T4R7   | 4.7             | M         | 100KHz, 0.25V     | 0.07                     | 2.50            |
| PCD0503□T5R6   | 5.6             | M         | 100KHz, 0.25V     | 0.08                     | 2.40            |
| PCD0503□T6R8   | 6.8             | M         | 100KHz, 0.25V     | 0.09                     | 2.20            |
| PCD0503□T8R2   | 8.2             | M         | 100KHz, 0.25V     | 0.10                     | 2.00            |
| PCD0503□T100   | 10              | K, M      | 1KHz, 0.25V       | 0.13                     | 1.80            |
| PCD0503□T120   | 12              | K, M      | 1KHz, 0.25V       | 0.16                     | 1.75            |
| PCD0503□T150   | 15              | K, M      | 1KHz, 0.25V       | 0.19                     | 1.70            |
| PCD0503□T150-1 | 15              | K, M      | 100KHz, 0.25V     | 0.15                     | 1.70            |
| PCD0503□T180   | 18              | K, M      | 1KHz, 0.25V       | 0.21                     | 1.60            |
| PCD0503□T220   | 22              | K, M      | 1KHz, 0.25V       | 0.28                     | 1.50            |
| PCD0503□T270   | 27              | K, M      | 1KHz, 0.25V       | 0.32                     | 1.40            |
| PCD0503□T330   | 33              | K, M      | 1KHz, 0.25V       | 0.38                     | 1.10            |
| PCD0503□T390   | 39              | K, M      | 1KHz, 0.25V       | 0.42                     | 1.00            |
| PCD0503□T470   | 47              | K, M      | 1KHz, 0.25V       | 0.43                     | 0.90            |
| PCD0503□T560   | 56              | K, M      | 1KHz, 0.25V       | 0.50                     | 0.85            |
| PCD0503□T680   | 68              | K, M      | 1KHz, 0.25V       | 0.68                     | 0.80            |
| PCD0503□T820   | 82              | K, M      | 1KHz, 0.25V       | 0.82                     | 0.65            |
| PCD0503□T101   | 100             | K, M      | 1KHz, 0.25V       | 1.10                     | 0.60            |
| PCD0503□T121   | 120             | K, M      | 1KHz, 0.25V       | 1.20                     | 0.58            |
| PCD0503□T151   | 150             | K, M      | 1KHz, 0.25V       | 1.50                     | 0.43            |
| PCD0503□T181   | 180             | K, M      | 1KHz, 0.25V       | 1.80                     | 0.41            |
| PCD0503□T221   | 220             | K, M      | 1KHz, 0.25V       | 2.00                     | 0.38            |
| PCD0503□T271   | 270             | K, M      | 1KHz, 0.25V       | 2.90                     | 0.35            |
| PCD0503□T331   | 330             | K, M      | 1KHz, 0.25V       | 3.30                     | 0.28            |
| PCD0503□T391   | 390             | K, M      | 1KHz, 0.25V       | 3.70                     | 0.26            |
| PCD0503□T471   | 470             | K, M      | 1KHz, 0.25V       | 4.90                     | 0.20            |
| PCD0503□T561   | 560             | K, M      | 1KHz, 0.25V       | 5.00                     | 0.19            |
| PCD0503□T681   | 680             | K, M      | 1KHz, 0.25V       | 6.00                     | 0.18            |
| PCD0503□T821   | 820             | K, M      | 1KHz, 0.25V       | 6.60                     | 0.15            |
| PCD0503□T102   | 1000            | K, M      | 1KHz, 0.25V       | 8.00                     | 0.13            |
| PCD0503□T102-2 | 1000            | K         | 1KHz, 0.25V       | 11.5                     | 0.135           |

**Note:** PCD0503□T150-1 The DC current when the inductance becomes 15% lower than its initial value

**■Electrical Characteristics**

PCD0504 Type(□:Tolerance):

| Part No        | L<br>(μH) | Tolerance | Test<br>Condition | DCR<br>(Ω) max. | IDC<br>(A) max. |
|----------------|-----------|-----------|-------------------|-----------------|-----------------|
| PCD0504□TR60-1 | 0.6       | P         | 100KHz, 1V        | 0.0182          | 11.00           |
| PCD0504□T1R0   | 1.0       | M         | 100KHz, 0.25V     | 0.010           | 5.00            |
| PCD0504□T1R0-1 | 1.0       | N         | 100KHz, 1V        | 0.0139          | 8.50            |
| PCD0504□T1R2   | 1.2       | M         | 100KHz, 0.25V     | 0.012           | 4.77            |
| PCD0504□T1R5   | 1.5       | M         | 100KHz, 0.25V     | 0.013           | 4.50            |
| PCD0504□T1R8   | 1.8       | M         | 100KHz, 0.25V     | 0.016           | 4.25            |
| PCD0504□T2R2   | 2.2       | M         | 100KHz, 0.25V     | 0.017           | 4.20            |
| PCD0504□T2R2-1 | 2.2       | N         | 100KHz, 1V        | 0.0251          | 6.00            |
| PCD0504□T2R7   | 2.7       | M         | 100KHz, 0.25V     | 0.025           | 4.00            |
| PCD0504□T3R3   | 3.3       | M         | 100KHz, 0.25V     | 0.034           | 2.50            |
| PCD0504□T3R9   | 3.9       | M         | 100KHz, 0.25V     | 0.035           | 2.20            |
| PCD0504□T4R7   | 4.7       | M         | 100KHz, 0.25V     | 0.035           | 2.00            |
| PCD0504□T4R7-2 | 4.7       | M         | 7.96MHz, 1V       | 0.060           | 3.00            |
| PCD0504□T5R6   | 5.6       | M         | 100KHz, 0.25V     | 0.042           | 1.82            |
| PCD0504□T6R8   | 6.8       | M         | 100KHz, 0.25V     | 0.060           | 1.69            |
| PCD0504□T8R2   | 8.2       | M         | 100KHz, 0.25V     | 0.060           | 1.56            |
| PCD0504□T100   | 10        | K, M      | 1KHz, 0.25V       | 0.100           | 1.44            |
| PCD0504□T120   | 12        | K, M      | 1KHz, 0.25V       | 0.120           | 1.40            |
| PCD0504□T150   | 15        | K, M      | 1KHz, 0.25V       | 0.140           | 1.30            |
| PCD0504□T180   | 18        | K, M      | 1KHz, 0.25V       | 0.150           | 1.23            |
| PCD0504□T220   | 22        | K, M      | 1KHz, 0.25V       | 0.180           | 1.11            |
| PCD0504□T270   | 27        | K, M      | 1KHz, 0.25V       | 0.200           | 0.97            |
| PCD0504□T330   | 33        | K, M      | 1KHz, 0.25V       | 0.230           | 0.88            |
| PCD0504□T390   | 39        | K, M      | 1KHz, 0.25V       | 0.320           | 0.80            |
| PCD0504□T470   | 47        | K, M      | 1KHz, 0.25V       | 0.370           | 0.72            |
| PCD0504□T470-2 | 47        | K, M      | 1KHz, 0.25V       | 0.370           | 1.50            |
| PCD0504□T560   | 56        | K, M      | 1KHz, 0.25V       | 0.420           | 0.68            |
| PCD0504□T680   | 68        | K, M      | 1KHz, 0.25V       | 0.460           | 0.61            |
| PCD0504□T820   | 82        | K, M      | 1KHz, 0.25V       | 0.600           | 0.58            |
| PCD0504□T101   | 100       | K, M      | 1KHz, 0.25V       | 0.700           | 0.52            |
| PCD0504□T121   | 120       | K, M      | 1KHz, 0.25V       | 0.930           | 0.48            |
| PCD0504□T151   | 150       | K, M      | 1KHz, 0.25V       | 1.100           | 0.40            |
| PCD0504□T181   | 180       | K, M      | 1KHz, 0.25V       | 1.380           | 0.38            |
| PCD0504□T221   | 220       | K, M      | 1KHz, 0.25V       | 1.570           | 0.35            |
| PCD0504□T221-1 | 220       | K, M      | 1KHz, 0.25V       | 1.570           | 0.47            |
| PCD0504□T221-2 | 220       | K, M      | 100KHz, 0.25V     | 1.400           | 0.40            |
| PCD0504□T271   | 270       | K, M      | 1KHz, 0.25V       | 1.600           | 0.34            |
| PCD0504□T331   | 330       | K, M      | 1KHz, 0.25V       | 1.820           | 0.32            |
| PCD0504□T471   | 470       | K, M      | 1KHz, 0.25V       | 2.760           | 0.30            |
| PCD0504□T561   | 560       | K, M      | 1KHz, 0.25V       | 3.100           | 0.29            |
| PCD0504□T681   | 680       | K, M      | 1KHz, 0.25V       | 4.050           | 0.28            |
| PCD0504□T821   | 820       | K, M      | 1KHz, 0.25V       | 5.560           | 0.27            |
| PCD0504□T102   | 1000      | K, M      | 1KHz, 0.25V       | 5.740           | 0.26            |
| PCD0504□T122-1 | 1200      | K         | 1KHz, 0.5V        | 6.400           | 0.16            |
| PCD0504□T152-1 | 1500      | K         | 1KHz, 0.5V        | 8.550           | 0.16            |
| PCD0504□T222-1 | 2200      | K         | 1KHz, 0.5V        | 12.800          | 0.10            |
| PCD0504□T332   | 3300      | K         | 1KHz, 0.25V       | 16.800          | 0.085           |
| PCD0504□T332-1 | 3300      | K         | 1KHz, 0.5V        | 24.000          | 0.08            |

Note: PCD0504□T1R0-1 / PCD0504□T2R2-1 The DC current when the inductance becomes 30% lower than its initial value  
 PCD0504□TR60-1 / PCD0504□T470-2 The DC current when the inductance becomes 35% lower than its initial value



**■Electrical Characteristics**

PCD0703 Type(□:Tolerance):

| Part No      | L<br>( $\mu$ H) | Tolerance | Test<br>Condition | DCR<br>( $\Omega$ ) max. | IDC<br>(A) max. |
|--------------|-----------------|-----------|-------------------|--------------------------|-----------------|
| PCD0703□T1R0 | 1.0             | M         | 100KHz, 0.25V     | 0.018                    | 1.64            |
| PCD0703□T1R5 | 1.5             | M         | 100KHz, 0.25V     | 0.020                    | 1.60            |
| PCD0703□T2R2 | 2.2             | M         | 100KHz, 0.25V     | 0.023                    | 1.60            |
| PCD0703□T3R3 | 3.3             | M         | 100KHz, 0.25V     | 0.025                    | 1.59            |
| PCD0703□T4R7 | 4.7             | M         | 100KHz, 0.25V     | 0.039                    | 1.54            |
| PCD0703□T6R8 | 6.8             | M         | 100KHz, 0.25V     | 0.040                    | 1.49            |
| PCD0703□T8R2 | 8.2             | M         | 100KHz, 0.25V     | 0.080                    | 1.46            |
| PCD0703□T100 | 10              | K, M      | 1KHz, 0.25V       | 0.080                    | 1.44            |
| PCD0703□T120 | 12              | K, M      | 1KHz, 0.25V       | 0.090                    | 1.39            |
| PCD0703□T150 | 15              | K, M      | 1KHz, 0.25V       | 0.104                    | 1.24            |
| PCD0703□T180 | 18              | K, M      | 1KHz, 0.25V       | 0.111                    | 1.12            |
| PCD0703□T220 | 22              | K, M      | 1KHz, 0.25V       | 0.129                    | 1.07            |
| PCD0703□T270 | 27              | K, M      | 1KHz, 0.25V       | 0.153                    | 0.94            |
| PCD0703□T330 | 33              | K, M      | 1KHz, 0.25V       | 0.170                    | 0.85            |
| PCD0703□T390 | 39              | K, M      | 1KHz, 0.25V       | 0.217                    | 0.74            |
| PCD0703□T470 | 47              | K, M      | 1KHz, 0.25V       | 0.252                    | 0.68            |
| PCD0703□T560 | 56              | K, M      | 1KHz, 0.25V       | 0.282                    | 0.64            |
| PCD0703□T680 | 68              | K, M      | 1KHz, 0.25V       | 0.332                    | 0.59            |
| PCD0703□T820 | 82              | K, M      | 1KHz, 0.25V       | 0.406                    | 0.54            |
| PCD0703□T101 | 100             | K, M      | 1KHz, 0.25V       | 0.481                    | 0.51            |
| PCD0703□T121 | 120             | K, M      | 1KHz, 0.25V       | 0.536                    | 0.49            |
| PCD0703□T151 | 150             | K, M      | 1KHz, 0.25V       | 0.755                    | 0.40            |
| PCD0703□T181 | 180             | K, M      | 1KHz, 0.25V       | 1.022                    | 0.36            |
| PCD0703□T221 | 220             | K, M      | 1KHz, 0.25V       | 1.200                    | 0.31            |
| PCD0703□T271 | 270             | K, M      | 1KHz, 0.25V       | 1.306                    | 0.29            |
| PCD0703□T331 | 330             | K, M      | 1KHz, 0.25V       | 1.495                    | 0.28            |
| PCD0703□T391 | 390             | K, M      | 1KHz, 0.25V       | 1.700                    | 0.27            |
| PCD0703□T471 | 470             | K, M      | 1KHz, 0.25V       | 2.100                    | 0.26            |
| PCD0703□T561 | 560             | K, M      | 1KHz, 0.25V       | 2.660                    | 0.25            |
| PCD0703□T681 | 680             | K, M      | 1KHz, 0.25V       | 3.000                    | 0.23            |
| PCD0703□T821 | 820             | K, M      | 1KHz, 0.25V       | 3.630                    | 0.21            |
| PCD0703□T102 | 1000            | K, M      | 1KHz, 0.25V       | 4.760                    | 0.20            |

**■Electrical Characteristics**

PCD0705 Type(□:Tolerance):

| Part No        | L<br>( $\mu$ H) | Tolerance | Test<br>Condition | DCR<br>( $\Omega$ ) max. | IDC<br>(A) max. |
|----------------|-----------------|-----------|-------------------|--------------------------|-----------------|
| PCD0705□T1R0   | 1.0             | M         | 100KHz, 0.25V     | 0.013                    | 3.40            |
| PCD0705□T1R5   | 1.5             | M         | 100KHz, 0.25V     | 0.016                    | 3.30            |
| PCD0705□T1R8   | 1.8             | M         | 100KHz, 0.25V     | 0.020                    | 3.20            |
| PCD0705□T2R2   | 2.2             | M         | 100KHz, 0.25V     | 0.023                    | 3.00            |
| PCD0705□T2R5   | 2.5             | M         | 100KHz, 0.25V     | 0.026                    | 2.90            |
| PCD0705□T2R7   | 2.7             | M         | 100KHz, 0.25V     | 0.027                    | 2.85            |
| PCD0705□T3R3   | 3.3             | M         | 100KHz, 0.25V     | 0.028                    | 2.80            |
| PCD0705□T4R7   | 4.7             | M         | 100KHz, 0.25V     | 0.045                    | 2.70            |
| PCD0705□T5R6   | 5.6             | M         | 100KHz, 0.25V     | 0.048                    | 2.65            |
| PCD0705□T6R8   | 6.8             | M         | 100KHz, 0.25V     | 0.058                    | 2.50            |
| PCD0705□T8R2   | 8.2             | M         | 100KHz, 0.25V     | 0.070                    | 2.40            |
| PCD0705□T100   | 10              | K, M      | 1KHz, 0.25V       | 0.070                    | 2.30            |
| PCD0705□T120   | 12              | K, M      | 1KHz, 0.25V       | 0.080                    | 2.00            |
| PCD0705□T150   | 15              | K, M      | 1KHz, 0.25V       | 0.090                    | 1.80            |
| PCD0705□T180   | 18              | K, M      | 1KHz, 0.25V       | 0.100                    | 1.60            |
| PCD0705□T220   | 22              | K, M      | 1KHz, 0.25V       | 0.110                    | 1.50            |
| PCD0705□T220-1 | 22              | K, M      | 100KHz, 0.25V     | 0.110                    | 1.50            |
| PCD0705□T270   | 27              | K, M      | 1KHz, 0.25V       | 0.120                    | 1.30            |
| PCD0705□T330   | 33              | K, M      | 1KHz, 0.25V       | 0.130                    | 1.20            |
| PCD0705□T390   | 39              | K, M      | 1KHz, 0.25V       | 0.160                    | 1.10            |
| PCD0705□T470   | 47              | K, M      | 1KHz, 0.25V       | 0.180                    | 1.10            |
| PCD0705□T560   | 56              | K, M      | 1KHz, 0.25V       | 0.240                    | 0.94            |
| PCD0705□T680   | 68              | K, M      | 1KHz, 0.25V       | 0.280                    | 0.85            |
| PCD0705□T820   | 82              | K, M      | 1KHz, 0.25V       | 0.370                    | 0.78            |
| PCD0705□T101   | 100             | K, M      | 1KHz, 0.25V       | 0.430                    | 0.72            |
| PCD0705□T121   | 120             | K, M      | 1KHz, 0.25V       | 0.470                    | 0.66            |
| PCD0705□T151   | 150             | K, M      | 1KHz, 0.25V       | 0.640                    | 0.58            |
| PCD0705□T181   | 180             | K, M      | 1KHz, 0.25V       | 0.710                    | 0.51            |
| PCD0705□T221   | 220             | K, M      | 1KHz, 0.25V       | 0.960                    | 0.49            |
| PCD0705□T271   | 270             | K, M      | 1KHz, 0.25V       | 1.110                    | 0.42            |
| PCD0705□T331   | 330             | K, M      | 1KHz, 0.25V       | 1.260                    | 0.40            |
| PCD0705□T391   | 390             | K, M      | 1KHz, 0.25V       | 1.770                    | 0.36            |
| PCD0705□T471   | 470             | K, M      | 1KHz, 0.25V       | 1.960                    | 0.34            |
| PCD0705□T561   | 560             | K, M      | 1KHz, 0.25V       | 2.280                    | 0.32            |
| PCD0705□T681   | 680             | K, M      | 1KHz, 0.25V       | 2.480                    | 0.30            |
| PCD0705□T821   | 820             | K, M      | 1KHz, 0.25V       | 3.400                    | 0.30            |
| PCD0705□T102   | 1000            | K, M      | 1KHz, 0.25V       | 4.200                    | 0.30            |
| PCD0705□T102-4 | 1000            | K, M      | 100KHz, 0.25V     | 3.300                    | 0.30            |
| PCD0705□T102-5 | 1000            | K, M      | 1KHz, 0.25V       | 4.500                    | 0.34            |
| PCD0705□T122   | 1200            | K, M      | 1KHz, 0.25V       | 5.000                    | 0.17            |
| PCD0705□T122-1 | 1200            | K, M      | 100KHz, 0.25V     | 4.500                    | 0.28            |
| PCD0705□T152   | 1500            | K, M      | 1KHz, 0.25V       | 5.520                    | 0.16            |

Note: PCD0705□T102-5 The DC current when the inductance becomes 35% lower than its initial value

**■Electrical Characteristics**

PCD1004 Type(□:Tolerance):

| Part No      | L<br>( $\mu$ H) | Tolerance | Test<br>Condition | DCR<br>( $\Omega$ ) max. | IDC<br>(A) max. |
|--------------|-----------------|-----------|-------------------|--------------------------|-----------------|
| PCD1004□T1R0 | 1.0             | M         | 100KHz, 0.25V     | 0.012                    | 8.70            |
| PCD1004□T1R2 | 1.2             | M         | 100KHz, 0.25V     | 0.014                    | 8.00            |
| PCD1004□T1R5 | 1.5             | M         | 100KHz, 0.25V     | 0.016                    | 7.48            |
| PCD1004□T1R8 | 1.8             | M         | 100KHz, 0.25V     | 0.018                    | 6.80            |
| PCD1004□T2R2 | 2.2             | M         | 100KHz, 0.25V     | 0.020                    | 5.40            |
| PCD1004□T2R7 | 2.7             | M         | 100KHz, 0.25V     | 0.024                    | 3.20            |
| PCD1004□T3R3 | 3.3             | M         | 100KHz, 0.25V     | 0.028                    | 2.85            |
| PCD1004□T3R9 | 3.9             | M         | 100KHz, 0.25V     | 0.030                    | 2.80            |
| PCD1004□T4R7 | 4.7             | M         | 100KHz, 0.25V     | 0.038                    | 2.75            |
| PCD1004□T5R6 | 5.6             | M         | 100KHz, 0.25V     | 0.040                    | 2.70            |
| PCD1004□T6R8 | 6.8             | M         | 100KHz, 0.25V     | 0.042                    | 2.65            |
| PCD1004□T8R2 | 8.2             | M         | 100KHz, 0.25V     | 0.048                    | 2.60            |
| PCD1004□T100 | 10              | K, M      | 1KHz, 0.25V       | 0.053                    | 2.38            |
| PCD1004□T120 | 12              | K, M      | 1KHz, 0.25V       | 0.061                    | 2.13            |
| PCD1004□T150 | 15              | K, M      | 1KHz, 0.25V       | 0.070                    | 1.87            |
| PCD1004□T180 | 18              | K, M      | 1KHz, 0.25V       | 0.081                    | 1.73            |
| PCD1004□T220 | 22              | K, M      | 1KHz, 0.25V       | 0.090                    | 1.60            |
| PCD1004□T270 | 27              | K, M      | 1KHz, 0.25V       | 0.100                    | 1.44            |
| PCD1004□T330 | 33              | K, M      | 1KHz, 0.25V       | 0.120                    | 1.26            |
| PCD1004□T390 | 39              | K, M      | 1KHz, 0.25V       | 0.151                    | 1.20            |
| PCD1004□T470 | 47              | K, M      | 1KHz, 0.25V       | 0.170                    | 1.10            |
| PCD1004□T560 | 56              | K, M      | 1KHz, 0.25V       | 0.199                    | 1.01            |
| PCD1004□T680 | 68              | K, M      | 1KHz, 0.25V       | 0.223                    | 0.91            |
| PCD1004□T820 | 82              | K, M      | 1KHz, 0.25V       | 0.252                    | 0.85            |
| PCD1004□T101 | 100             | K, M      | 1KHz, 0.25V       | 0.344                    | 0.74            |
| PCD1004□T121 | 120             | K, M      | 1KHz, 0.25V       | 0.396                    | 0.69            |
| PCD1004□T151 | 150             | K, M      | 1KHz, 0.25V       | 0.544                    | 0.61            |
| PCD1004□T181 | 180             | K, M      | 1KHz, 0.25V       | 0.621                    | 0.56            |
| PCD1004□T221 | 220             | K, M      | 1KHz, 0.25V       | 0.721                    | 0.53            |
| PCD1004□T271 | 270             | K, M      | 1KHz, 0.25V       | 0.949                    | 0.45            |
| PCD1004□T331 | 330             | K, M      | 1KHz, 0.25V       | 1.100                    | 0.42            |
| PCD1004□T391 | 390             | K, M      | 1KHz, 0.25V       | 1.245                    | 0.38            |
| PCD1004□T471 | 470             | K, M      | 1KHz, 0.25V       | 1.526                    | 0.35            |
| PCD1004□T561 | 560             | K, M      | 1KHz, 0.25V       | 1.904                    | 0.32            |

**Electrical Characteristics**

PCD1005 Type(□:Tolerance):

| Part No        | L<br>( $\mu$ H) | Tolerance | Test<br>Condition | DCR<br>( $\Omega$ ) max. | IDC<br>(A) max. |
|----------------|-----------------|-----------|-------------------|--------------------------|-----------------|
| PCD1005□T1R2   | 1.2             | M         | 100KHz, 0.25V     | 0.009                    | 8.63            |
| PCD1005□T1R5   | 1.5             | M         | 100KHz, 0.25V     | 0.010                    | 8.00            |
| PCD1005□T2R2   | 2.2             | M         | 100KHz, 0.25V     | 0.014                    | 6.80            |
| PCD1005□T3R3   | 3.3             | M         | 100KHz, 0.25V     | 0.018                    | 3.05            |
| PCD1005□T4R7   | 4.7             | M         | 100KHz, 0.25V     | 0.020                    | 2.90            |
| PCD1005□T4R7-1 | 4.7             | M         | 100KHz, 0.25V     | 0.020                    | 7.00            |
| PCD1005□T6R8   | 6.8             | M         | 100KHz, 0.25V     | 0.040                    | 2.75            |
| PCD1005□T8R2   | 8.2             | M         | 100KHz, 0.25V     | 0.050                    | 2.70            |
| PCD1005□T100   | 10              | K, M      | 1KHz, 0.25V       | 0.060                    | 2.60            |
| PCD1005□T120   | 12              | K, M      | 1KHz, 0.25V       | 0.070                    | 2.45            |
| PCD1005□T150   | 15              | K, M      | 1KHz, 0.25V       | 0.080                    | 2.27            |
| PCD1005□T180   | 18              | K, M      | 1KHz, 0.25V       | 0.090                    | 2.15            |
| PCD1005□T220   | 22              | K, M      | 1KHz, 0.25V       | 0.100                    | 1.95            |
| PCD1005□T270   | 27              | K, M      | 1KHz, 0.25V       | 0.110                    | 1.76            |
| PCD1005□T330   | 33              | K, M      | 1KHz, 0.25V       | 0.120                    | 1.50            |
| PCD1005□T390   | 39              | K, M      | 1KHz, 0.25V       | 0.140                    | 1.37            |
| PCD1005□T470   | 47              | K, M      | 1KHz, 0.25V       | 0.170                    | 1.28            |
| PCD1005□T560   | 56              | K, M      | 1KHz, 0.25V       | 0.190                    | 1.17            |
| PCD1005□T680   | 68              | K, M      | 1KHz, 0.25V       | 0.220                    | 1.11            |
| PCD1005□T820   | 82              | K, M      | 1KHz, 0.25V       | 0.250                    | 1.00            |
| PCD1005□T101   | 100             | K, M      | 1KHz, 0.25V       | 0.350                    | 0.97            |
| PCD1005□T121   | 120             | K, M      | 1KHz, 0.25V       | 0.400                    | 0.89            |
| PCD1005□T151   | 150             | K, M      | 1KHz, 0.25V       | 0.470                    | 0.78            |
| PCD1005□T181   | 180             | K, M      | 1KHz, 0.25V       | 0.630                    | 0.72            |
| PCD1005□T221   | 220             | K, M      | 1KHz, 0.25V       | 0.730                    | 0.66            |
| PCD1005□T271   | 270             | K, M      | 1KHz, 0.25V       | 0.970                    | 0.57            |
| PCD1005□T331   | 330             | K, M      | 1KHz, 0.25V       | 1.150                    | 0.52            |
| PCD1005□T391   | 390             | K, M      | 1KHz, 0.25V       | 1.300                    | 0.48            |
| PCD1005□T471   | 470             | K, M      | 1KHz, 0.25V       | 1.480                    | 0.42            |
| PCD1005□T561   | 560             | K, M      | 1KHz, 0.25V       | 1.900                    | 0.33            |
| PCD1005□T681   | 680             | K, M      | 1KHz, 0.25V       | 2.250                    | 0.28            |
| PCD1005□T821   | 820             | K, M      | 1KHz, 0.25V       | 2.550                    | 0.24            |
| PCD1005□T102   | 1000            | K, M      | 1KHz, 0.25V       | 3.490                    | 0.20            |

**■Electrical Characteristics**

PCD1006 Type(□:Tolerance):

| Part No      | L<br>( $\mu$ H) | Tolerance | Test<br>Condition | DCR<br>( $\Omega$ ) max. | IDC<br>(A) max. |
|--------------|-----------------|-----------|-------------------|--------------------------|-----------------|
| PCD1006□T1R0 | 1.0             | M         | 100KHz, 0.25V     | 0.008                    | 9.50            |
| PCD1006□T1R8 | 1.8             | M         | 100KHz, 0.25V     | 0.011                    | 8.60            |
| PCD1006□T2R2 | 2.2             | M         | 100KHz, 0.25V     | 0.012                    | 7.20            |
| PCD1006□T3R3 | 3.3             | M         | 100KHz, 0.25V     | 0.016                    | 6.80            |
| PCD1006□T3R9 | 3.9             | M         | 100KHz, 0.25V     | 0.017                    | 6.35            |
| PCD1006□T4R7 | 4.7             | M         | 100KHz, 0.25V     | 0.019                    | 5.45            |
| PCD1006□T5R6 | 5.6             | M         | 100KHz, 0.25V     | 0.024                    | 4.30            |
| PCD1006□T6R8 | 6.8             | M         | 100KHz, 0.25V     | 0.035                    | 3.52            |
| PCD1006□T8R2 | 8.2             | M         | 100KHz, 0.25V     | 0.045                    | 3.51            |
| PCD1006□T100 | 10              | K, M      | 1KHz, 0.25V       | 0.060                    | 3.50            |
| PCD1006□T120 | 12              | K, M      | 1KHz, 0.25V       | 0.070                    | 3.40            |
| PCD1006□T150 | 15              | K, M      | 1KHz, 0.25V       | 0.080                    | 3.10            |
| PCD1006□T180 | 18              | K, M      | 1KHz, 0.25V       | 0.090                    | 3.00            |
| PCD1006□T220 | 22              | K, M      | 1KHz, 0.25V       | 0.100                    | 2.60            |
| PCD1006□T270 | 27              | K, M      | 1KHz, 0.25V       | 0.110                    | 2.40            |
| PCD1006□T330 | 33              | K, M      | 1KHz, 0.25V       | 0.120                    | 2.30            |
| PCD1006□T390 | 39              | K, M      | 1KHz, 0.25V       | 0.140                    | 2.10            |
| PCD1006□T470 | 47              | K, M      | 1KHz, 0.25V       | 0.170                    | 1.95            |
| PCD1006□T560 | 56              | K, M      | 1KHz, 0.25V       | 0.190                    | 1.85            |
| PCD1006□T680 | 68              | K, M      | 1KHz, 0.25V       | 0.220                    | 1.65            |
| PCD1006□T820 | 82              | K, M      | 1KHz, 0.25V       | 0.250                    | 1.50            |
| PCD1006□T101 | 100             | K, M      | 1KHz, 0.25V       | 0.350                    | 1.40            |
| PCD1006□T121 | 120             | K, M      | 1KHz, 0.25V       | 0.400                    | 1.30            |
| PCD1006□T151 | 150             | K, M      | 1KHz, 0.25V       | 0.470                    | 1.20            |
| PCD1006□T181 | 180             | K, M      | 1KHz, 0.25V       | 0.630                    | 1.00            |
| PCD1006□T221 | 220             | K, M      | 1KHz, 0.25V       | 0.730                    | 0.95            |
| PCD1006□T271 | 270             | K, M      | 1KHz, 0.25V       | 0.970                    | 0.90            |
| PCD1006□T331 | 330             | K, M      | 1KHz, 0.25V       | 1.150                    | 0.80            |
| PCD1006□T391 | 390             | K, M      | 1KHz, 0.25V       | 1.300                    | 0.75            |
| PCD1006□T471 | 470             | K, M      | 1KHz, 0.25V       | 1.480                    | 0.65            |
| PCD1006□T561 | 560             | K, M      | 1KHz, 0.25V       | 1.900                    | 0.60            |
| PCD1006□T681 | 680             | K, M      | 1KHz, 0.25V       | 2.250                    | 0.50            |
| PCD1006□T821 | 820             | K, M      | 1KHz, 0.25V       | 2.550                    | 0.48            |
| PCD1006□T102 | 1000            | K, M      | 1KHz, 0.25V       | 3.000                    | 0.46            |

**SMD Power Inductor**

**■Tape and Reel specifications**



Unit: mm

| Type    | Tape size |    | Parts Per Reel |
|---------|-----------|----|----------------|
|         | W         | P  | 13"            |
| PCD0301 | 12        | 8  | 3000           |
| PCD0302 | 12        | 8  | 2000           |
| PCD0403 | 12        | 8  | 2000           |
| PCD0502 | 12        | 8  | 2000           |
| PCD0503 | 12        | 8  | 1500           |
| PCD0504 | 12        | 8  | 1500           |
| PCD0703 | 16        | 12 | 1000           |
| PCD0705 | 16        | 12 | 1000           |
| PCD1004 | 24        | 12 | 1000           |
| PCD1005 | 24        | 12 | 500            |
| PCD1006 | 24        | 16 | 500            |

**SMD Power Inductor**

**■ SMT Power Inductor Environmental Specifications**

General

| Items                    | Specifications   |
|--------------------------|--|
| Shelf Storage conditions | Temperature range: 15~28°C; Humidity: <80% relative humidity.<br>Recommended product should be used within one year from the time of delivery. |

Environmental test

| Test Items                    | Specifications   | Test Conditions / Test Methods  |
|-------------------------------|--|---|
| High temperature Storage test | No case deformation or change in appearance.<br>$\Delta L/L \leq 10\%$ | Temperature 85±2°C,<br>Time: 48±2 hours,<br>Tested after 1hour at room temperature.   |
| Low temperature Storage test  |  | Temperature -25±2°C,<br>Time: 48±2 hours,<br>Tested after 1hour at room temperature.  |
| Humidity test                 |  | Temperature 40±2°C, 90~95% relative humidity<br>Time: 96±2 hours<br>Tested after 1hour at room temperature.                                   |
| Thermal shock test            |  | First -25°C 30minutes then 25°C 10 minutes last 85°C 30 minutes, as 1 cycle. Go through 5 cycles.<br>Tested after 1 hour at room temperature. |

Mechanical test

| Test Items                   | Specifications   | Test Conditions / Test Methods  |
|------------------------------|--|---|
| Solder ability test          | Terminal area must have 90% minimum solder coverage.                   | Dip pads in flux then dip in solder pot (SnCuNi) at 245±5°C for 3 seconds.  |
| Resistance to Soldering Heat | No case deformation or change in appearance.                           | Flux should cover the whole of the sample before heating, then be preheated for about 2 minutes over temperature of 130~150°C. Immersing to 260±5°C for 10 seconds. |
| Vibration test               | No case deformation or change in appearance.<br>$\Delta L/L \leq 10\%$ | Apply frequency 10~55Hz. 1.5mm amplitude in each of perpendicular direction for 2 hours.  |
| Shock resistance             |  | Drop down with 981m/s <sup>2</sup> (100G) shock attitude upon a rubber block method shock testing machine, for 1 time. In each of three orientations.               |

The condition of reflow (recommendation)



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