

Type 300/301 –55 °C to 105 °C Long-Life, Switching Power Grade Radial

High Capacitance and Ultra-Low ESR



The Types 300 and 301 are the wide-temperature, low-ESR capacitors for power-supply outputs and UPS battery stiffening. The exceptionally low ESRs enable high ripple-current capability. With series inductance of 12 to 16 nH and ripple currents to 16 amps one of these capacitors can save by replacing three or four of the 12.5 mm diameter capacitors routinely at the output of switching power supplies. Type 300 has three leads for rugged, reverse-proof mounting, and Type 301 has two leads. Types 300R and 301R deliver even lower ESR and higher ripple.

Highlights

- 4000 hour load life
- Ripple Current to 16 amps
- ESRs to 6 mΩ
- > 90% capacitance at –40 °C
- Replaces multiple capacitors

[RoHS Certificate](#)

Specifications

| | | | | | | | | |
|----------------------------|-----------------------------------------------------|--------------|--------------|---------------|---------------|--------------|---------------|------------------------|
| Temperature Range | –55 °C to +105 °C | | | | | | | |
| Rated Voltage Range | 6.3 to 250 Vdc | | | | | | | |
| Capacitance Range | 8.2 µF to 33,000 µF | | | | | | | |
| Capacitance Tolerance | 6.3 to 100 Vdc; –10 + 75%, 160 to 250 Vdc; –10 +50% | | | | | | | |
| Leakage Current | ≤0.5 \sqrt{CV} µA, 4 mA max, 5 minutes | | | | | | | |
| Ripple Current Multipliers | Ambient Temperature | | | | | | | |
| | 45 °C | 55 °C | 65 °C | 75 °C | 85 °C | 95 °C | 105 °C | |
| | 1.66 | 1.52 | 1.37 | 1.20 | 1.00 | 0.75 | 0.36 | |
| | Frequency | | | | | | | |
| | | 50 Hz | 60 Hz | 120 Hz | 360 Hz | 1 kHz | 5 kHz | 10 kHz & up |
| | Less than .77" Diameter | | | | | | | |
| | 6.3 & 7.5 V | 0.76 | 0.81 | 1.00 | 1.23 | 1.35 | 1.41 | 1.43 |
| | 10 to 40 V | 0.74 | 0.79 | 1.00 | 1.29 | 1.46 | 1.55 | 1.57 |
| | 50V | 0.72 | 0.78 | 1.00 | 1.33 | 1.54 | 1.67 | 1.69 |
| | 63 & 75 V | 0.71 | 0.76 | 1.00 | 1.38 | 1.64 | 1.82 | 1.86 |
| 100 to 250 V | 0.68 | 0.74 | 1.00 | 1.51 | 2.00 | 2.51 | 2.67 | |
| .77" Diameter | | | | | | | | |
| 6.3 & 7.5 V | 0.82 | 0.86 | 1.00 | 1.15 | 1.21 | 1.24 | 1.25 | |
| 10 to 40 V | 0.78 | 0.83 | 1.00 | 1.20 | 1.30 | 1.35 | 1.36 | |
| 50V | 0.76 | 0.81 | 1.00 | 1.25 | 1.38 | 1.45 | 1.47 | |
| 63 & 75 V | 0.74 | 0.80 | 1.00 | 1.28 | 1.43 | 1.52 | 1.54 | |
| 100 to 250 V | 0.76 | 0.81 | 1.00 | 1.24 | 1.37 | 1.44 | 1.46 | |
| .895" Diameter | | | | | | | | |
| 6.3 & 7.5 V | 0.82 | 0.86 | 1.00 | 1.14 | 1.20 | 1.23 | 1.24 | |
| 10 to 40 V | 0.80 | 0.84 | 1.00 | 1.17 | 1.25 | 1.29 | 1.30 | |
| 50V | 0.75 | 0.80 | 1.00 | 1.27 | 1.42 | 1.50 | 1.52 | |
| 63 & 75 V | 0.75 | 0.80 | 1.00 | 1.26 | 1.40 | 1.48 | 1.50 | |
| 100 to 250 V | 0.76 | 0.81 | 1.00 | 1.25 | 1.38 | 1.46 | 1.48 | |
| 1.02" Diameter | | | | | | | | |
| 6.3 & 7.5 V | 0.84 | 0.88 | 1.00 | 1.12 | 1.17 | 1.19 | 1.20 | |
| 10 to 40 V | 0.81 | 0.86 | 1.00 | 1.15 | 1.22 | 1.25 | 1.26 | |
| 50V | 0.76 | 0.81 | 1.00 | 1.23 | 1.35 | 1.42 | 1.44 | |
| 63 & 75 V | 0.77 | 0.81 | 1.00 | 1.23 | 1.35 | 1.42 | 1.44 | |
| 100 to 250 V | 0.76 | 0.81 | 1.00 | 1.24 | 1.37 | 1.44 | 1.46 | |

Type 300/301 -55 °C to 105 °C Long-Life, Switching Power Grade Radial

High Capacitance and Ultra-Low ESR

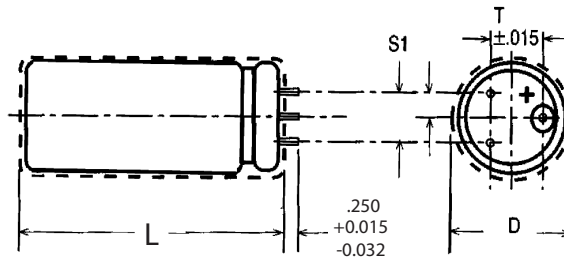
| | |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Load Life RoHS, ≥ .77" RoHS, < .77" Non-RoHS, < .77" | 4000 h at full load at 85 °C 2000 h at full load at 85 °C 4000 h at full load at 85 °C Δ Capacitance ±20% ESR 200% of limit DCL 100% of limit |
| Shelf Life Test | 500 h at 105 °C, capacitance, ESR and DCL, initial requirements |
| Vibration | 10 to 55 Hz, 0.06" and 10 g max, 2 h each plane |

Part Numbering System

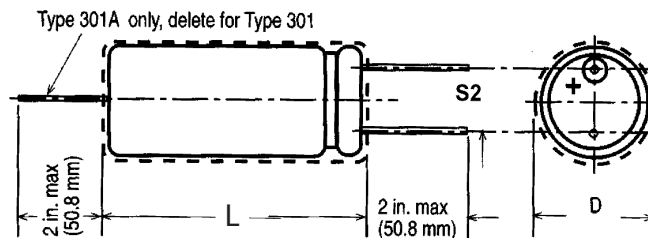
| | | | | | | | |
|-------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|----------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| NR | 301R | 333 | U | 6R3 | JS | 2 | E |
| RoHS | Type | Capacitance | Tolerance | Voltage | Case Code | Insulation | Epoxy |
| Blank = Compliant | 300 - 3 leads 300R - 3 leads, low ESR 301 - 2 leads 301R - 2 leads, low ESR 301A - Laydown 3 leads | 152 = 1500 μF 102 = 1000 μF | M = ±20 T = 10% +50% U = -10 +75% | 6R3 = 6.3 V 063 = 63 Vdc 100 = 100 Vdc | | 0 = bare can 1 = Polyester 2 = PVC 8 = PVC w/standoffs* 9 = Polyester w/standoffs* *Not available in .77" diameter | E = epoxy Blank = no epoxy |

Outline Drawing

0.77", 0.895" and 1.02" Diameters



Type
300/300R
Three
Leads



Type
301/301R
Two
Leads

Type 300/301 –55 °C to 105 °C Long-Life, Switching Power Grade Radial

High Capacitance and Ultra-Low ESR

Case Dimensions

| Case Code | Insulated D ± 0.015 (0.4 mm) L ± 0.062 (1.6 mm) D x L | Epoxy endseal L Max | Bare Can D ± 0.015 (0.4 mm) L ± 0.030 (0.8 mm) D x L | Lead Spacing | | Lead Diameter dia. | AWG |
|---------------------------------------|----------------------------------------------------------------|------------------------|---------------------------------------------------------------|----------------------------------|----------------------------------|-----------------------|-----|
| | | | | Type 300 S1 ±0.020(0.5 mm) | Type 301 S2 ±0.020(0.5 mm) | | |
| Case Dimensions in Inches | | | | | | | |
| GE | .765 x 1.150 | 1.212 | 0.750 x 1.125 | 0.200 | 0.300 | 0.040 | 18 |
| GJ | .765 x 1.650 | 1.712 | 0.750 x 1.625 | 0.200 | 0.300 | 0.040 | 18 |
| GL | .765 x 2.150 | 2.212 | 0.750 x 2.125 | 0.200 | 0.300 | 0.040 | 18 |
| GP | .765 x 2.650 | 2.712 | 0.750 x 2.625 | 0.200 | 0.300 | 0.040 | 18 |
| GS | .765 x 3.150 | 3.212 | 0.750 x 3.125 | 0.200 | 0.300 | 0.040 | 18 |
| GT | .765 x 3.650 | 3.712 | 0.750 x 3.625 | 0.200 | 0.300 | 0.040 | 18 |
| HE | .890 x 1.150 | 1.212 | 0.875 x 1.125 | 0.300 | 0.400 | 0.040 | 18 |
| HJ | .890 x 1.650 | 1.712 | 0.875 x 1.625 | 0.300 | 0.400 | 0.040 | 18 |
| HL | .890 x 2.150 | 2.212 | 0.875 x 2.125 | 0.300 | 0.400 | 0.040 | 18 |
| HP | .890 x 2.650 | 2.712 | 0.875 x 2.625 | 0.300 | 0.400 | 0.040 | 18 |
| HS | .890 x 3.150 | 3.212 | 0.875 x 3.125 | 0.300 | 0.400 | 0.040 | 18 |
| HT | .890 x 3.650 | 3.712 | 0.875 x 3.625 | 0.300 | 0.400 | 0.040 | 18 |
| JE | 1.015 x 1.150 | 1.212 | 1.000 x 1.125 | 0.300 | 0.400 | 0.040 | 18 |
| JJ | 1.015 x 1.650 | 1.712 | 1.000 x 1.625 | 0.300 | 0.400 | 0.040 | 18 |
| JL | 1.015 x 2.150 | 2.212 | 1.000 x 2.125 | 0.300 | 0.400 | 0.040 | 18 |
| JP | 1.015 x 2.650 | 2.712 | 1.000 x 2.625 | 0.300 | 0.400 | 0.040 | 18 |
| JS | 1.015 x 3.150 | 3.212 | 1.000 x 3.125 | 0.300 | 0.400 | 0.040 | 18 |
| JT | 1.015 x 3.650 | 3.712 | 1.000 x 3.625 | 0.300 | 0.400 | 0.040 | 18 |
| Case Dimensions in Millimeters | | | | | | | |
| EG | 13.0 x 21.5 | 23 | 12.5 x 20.0 | 5.00 | 2.50 | 0.81 | 20 |
| EK | 13.0 x 26.5 | 29.0 | 12.5 x 25.0 | 5.00 | 2.50 | 0.81 | 20 |
| EM | 13.0 x 28.0 | 29.5 | 12.5 x 26.5 | 5.00 | 2.50 | 0.81 | 20 |
| EN | 13.0 x 35.0 | 36.0 | 12.5 x 33.5 | 5.00 | 2.50 | 0.81 | 20 |
| ER | 13.0 x 44.0 | 45.5 | 12.5 x 42.5 | 5.00 | 2.50 | 0.81 | 20 |
| FK | 16.5 x 26.5 | 27.9 | 16.0 x 25.0 | 7.50 | 3.75 | 0.81 | 20 |
| FF | 16.5 x 33.5 | 36.0 | 16.0 x 32.0 | 7.50 | 3.75 | 0.81 | 20 |
| FQ | 16.5 x 37.5 | 40.0 | 16.0 x 36.0 | 7.50 | 3.75 | 0.81 | 20 |
| FV | 16.5 x 41.5 | 42.4 | 16.0 x 40.0 | 7.50 | 3.75 | 0.81 | 20 |
| LQ | 18.5 x 37.5 | 40.0 | 18.0 x 36.0 | 7.50 | 3.75 | 0.81 | 20 |
| LV | 18.5 x 41.5 | 43.0 | 18.0 x 40.0 | 7.50 | 3.75 | 0.81 | 20 |
| GE | 19.4 x 29.2 | 30.8 | 19.1 x 28.6 | 5.08 | 7.62 | 1.02 | 18 |
| GJ | 19.4 x 41.9 | 43.5 | 19.1 x 41.3 | 5.08 | 7.62 | 1.02 | 18 |
| GL | 19.4 x 54.6 | 56.2 | 19.1 x 54.0 | 5.08 | 7.62 | 1.02 | 18 |
| GP | 19.4 x 67.3 | 68.9 | 19.1 x 66.7 | 5.08 | 7.62 | 1.02 | 18 |
| GS | 19.4 x 80.0 | 81.6 | 19.1 x 79.4 | 5.08 | 7.62 | 1.02 | 18 |
| GT | 19.4 x 92.7 | 94.3 | 19.1 x 92.1 | 5.08 | 7.62 | 1.02 | 18 |
| HE | 22.6 x 29.2 | 30.8 | 22.2 x 28.6 | 7.62 | 10.16 | 1.02 | 18 |
| HJ | 22.6 x 41.9 | 43.5 | 22.2 x 41.3 | 7.62 | 10.16 | 1.02 | 18 |
| HL | 22.6 x 54.6 | 56.2 | 22.2 x 54.0 | 7.62 | 10.16 | 1.02 | 18 |
| HP | 22.6 x 67.3 | 68.9 | 22.2 x 66.7 | 7.62 | 10.16 | 1.02 | 18 |
| HS | 22.6 x 80.0 | 81.6 | 22.2 x 79.4 | 7.62 | 10.16 | 1.02 | 18 |
| HT | 22.6 x 92.7 | 94.3 | 22.2 x 92.1 | 7.62 | 10.16 | 1.02 | 18 |
| JE | 25.8 x 29.2 | 30.8 | 25.4 x 28.6 | 7.62 | 10.16 | 1.02 | 18 |
| JJ | 25.8 x 41.9 | 43.5 | 25.4 x 41.3 | 7.62 | 10.16 | 1.02 | 18 |
| HL | 25.8 x 54.6 | 56.2 | 25.4 x 54.0 | 7.62 | 10.16 | 1.02 | 18 |
| JP | 25.8 x 67.3 | 68.9 | 25.4 x 66.7 | 7.62 | 10.16 | 1.02 | 18 |
| JS | 25.8 x 80.0 | 81.6 | 25.4 x 79.4 | 7.62 | 10.16 | 1.02 | 18 |
| JT | 25.8 x 92.7 | 94.3 | 25.4 x 92.1 | 7.62 | 10.16 | 1.02 | 18 |

Type 300/301 –55 °C to 105 °C Long-Life, Switching Power Grade Radial

High Capacitance and Ultra-Low ESR Ratings

| Cap. (µF) | Catalog Part Number | ESR MAX @ 25°C | | Ripple MAX @ 85°C | | Nom Size Insulated D x L (in) | Cap. (µF) | Catalog Part Number | ESR MAX @ 25°C | | Ripple MAX @ 85°C | | Nom Size Insulated D x L (in) |
|------------------------------|------------------------|-------------------|----------------|----------------------|----------------|----------------------------------------|-------------------------------|------------------------|-------------------|----------------|----------------------|----------------|----------------------------------------|
| | | 120 Hz | 20 kHz (mΩ) | 120 Hz | 20 kHz (mΩ) | | | | 120 Hz | 20 kHz (mΩ) | 120 Hz | 20 kHz (mΩ) | |
| 6.3 Vdc (9 Vdc Surge) | | | | | | | 7.5 Vdc (10 Vdc Surge) | | | | | | |
| 2700 | 301272U6R3GE2 | 143.0 | 81.5 | 1.71 | 2.13 | .77 x 1.15 | 2200 | 301222U7R5GE2 | 147.0 | 80.8 | 1.69 | 2.14 | .77 x 1.15 |
| 2700 | 301R272U6R3GE2 | 124.0 | 70.6 | 1.84 | 2.29 | .77 x 1.15 | 2200 | 301R222U7R5GE2 | 127.0 | 70.0 | 1.81 | 2.30 | .77 x 1.15 |
| 3900 | 301392U6R3HE2 | 100.0 | 61.1 | 2.24 | 2.71 | .895 x 1.15 | 3900 | 301392U7R5HE2 | 103.0 | 61.6 | 2.21 | 2.69 | .895 x 1.15 |
| 3900 | 301R392U6R3HE2 | 86.8 | 50.3 | 2.41 | 2.98 | .895 x 1.15 | 3900 | 301R392U7R5HE2 | 88.9 | 48.9 | 2.38 | 3.02 | .895 x 1.15 |
| 4700 | 301472U6R3GJ2 | 72.5 | 41.3 | 2.65 | 3.30 | .77 x 1.65 | 4700 | 301472U7R5GJ2 | 74.5 | 41.0 | 2.61 | 3.32 | .77 x 1.65 |
| 4700 | 301R472U6R3GJ2 | 62.8 | 35.8 | 2.84 | 3.55 | .77 x 1.65 | 4700 | 301R472U7R5GJ2 | 64.5 | 35.5 | 2.80 | 3.56 | .77 x 1.65 |
| 5600 | 301562U6R3JE2 | 83.8 | 57.0 | 2.56 | 2.92 | 1.02 x 1.15 | 5600 | 301562U7R5JE2 | 85.5 | 56.5 | 2.53 | 2.94 | 1.02 x 1.15 |
| 5600 | 301R562U6R3JE2 | 72.7 | 41.4 | 2.75 | 3.43 | 1.02 x 1.15 | 5600 | 301R562U7R5JE2 | 74.1 | 41.5 | 2.72 | 3.42 | 1.02 x 1.15 |
| 8200 | 301822U6R3GL2 | 49.2 | 28.1 | 4.02 | 5.02 | .77 x 2.15 | 6800 | 301682U7R5GL2 | 50.6 | 27.8 | 3.97 | 5.05 | .77 x 2.15 |
| 8200 | 301R822U6R3GL2 | 42.7 | 24.3 | 4.32 | 5.40 | .77 x 2.15 | 6800 | 301R682U7R5GL2 | 43.8 | 24.1 | 4.26 | 5.42 | .77 x 2.15 |
| 8200 | 301822U6R3HJ2 | 51.1 | 31.2 | 3.71 | 4.48 | .895 x 1.65 | 6800 | 301682U7R5HJ2 | 52.4 | 31.4 | 3.67 | 4.46 | .895 x 1.65 |
| 8200 | 301R822U6R3HJ2 | 44.3 | 25.7 | 3.99 | 4.93 | .895 x 1.65 | 6800 | 301R682U7R5HJ2 | 45.4 | 25.0 | 3.94 | 5.01 | .895 x 1.65 |
| 10000 | 301103U6R3GP2 | 37.8 | 21.5 | 5.12 | 6.39 | .77 x 2.65 | 8200 | 301822U7R5GP2 | 38.7 | 21.3 | 5.05 | 6.42 | .77 x 2.65 |
| 10000 | 301R103U6R3GP2 | 32.7 | 18.7 | 5.50 | 6.86 | .77 x 2.65 | 8200 | 301R822U7R5GP2 | 33.6 | 18.5 | 5.43 | 6.90 | .77 x 2.65 |
| 12000 | 301123U6R3GS2 | 31.0 | 17.7 | 6.17 | 7.70 | .77 x 3.15 | 10000 | 301103U7R5HL2 | 35.8 | 21.5 | 5.14 | 6.25 | .895 x 2.15 |
| 12000 | 301R123U6R3GS2 | 26.8 | 15.3 | 6.62 | 8.27 | .77 x 3.15 | 10000 | 301R103U7R5HL2 | 26.2 | 14.4 | 6.01 | 7.64 | .895 x 2.15 |
| 12000 | 301123U6R3HL2 | 35.0 | 21.3 | 5.20 | 6.27 | .895 x 2.15 | 10000 | 301103U7R5JJ2 | 43.8 | 28.9 | 4.35 | 5.05 | 1.02 x 1.65 |
| 12000 | 301R123U6R3HL2 | 25.5 | 14.8 | 6.09 | 7.54 | .895 x 2.15 | 10000 | 301R103U7R5JJ2 | 38.0 | 21.3 | 4.67 | 5.89 | 1.02 x 1.65 |
| 12000 | 301123U6R3JJ2 | 43.0 | 29.2 | 4.39 | 5.02 | 1.02 x 1.65 | 12000 | 301123U7R5GS2 | 31.8 | 17.5 | 6.09 | 7.74 | .77 x 3.15 |
| 12000 | 301R123U6R3JJ2 | 37.2 | 21.2 | 4.72 | 5.89 | 1.02 x 1.65 | 12000 | 301R123U7R5GS2 | 27.5 | 15.1 | 6.54 | 8.31 | .77 x 3.15 |
| 15000 | 301153U6R3GT2 | 26.6 | 15.1 | 7.10 | 8.86 | .77 x 3.65 | 12000 | 301123U7R5GT2 | 27.2 | 15.0 | 7.01 | 8.91 | .77 x 3.65 |
| 15000 | 301R153U6R3GT2 | 23.0 | 13.1 | 7.62 | 9.52 | .77 x 3.65 | 12000 | 301R123U7R5GT2 | 23.6 | 13.0 | 7.53 | 9.57 | .77 x 3.65 |
| 15000 | 301153U6R3HP2 | 27.1 | 16.5 | 6.57 | 7.93 | .895 x 2.65 | 15000 | 301153U7R5HP2 | 27.7 | 16.6 | 6.50 | 7.91 | .895 x 2.65 |
| 15000 | 301R153U6R3HP2 | 19.5 | 11.3 | 7.75 | 9.60 | .895 x 2.65 | 15000 | 301R153U7R5HP2 | 20.0 | 11.0 | 7.65 | 9.73 | .895 x 2.65 |
| 18000 | 301183U6R3JL2 | 29.6 | 20.1 | 6.08 | 6.95 | 1.02 x 2.15 | 15000 | 301153U7R5JL2 | 30.1 | 19.9 | 6.02 | 6.99 | 1.02 x 2.15 |
| 18000 | 301R183U6R3JL2 | 19.1 | 10.9 | 7.57 | 9.45 | 1.02 x 2.15 | 15000 | 301R153U7R5JL2 | 19.6 | 10.9 | 7.47 | 9.41 | 1.02 x 2.15 |
| 22000 | 301223U6R3HS2 | 22.4 | 13.7 | 7.88 | 9.51 | .895 x 3.15 | 18000 | 301183U7R5HS2 | 22.9 | 13.8 | 7.79 | 9.48 | .895 x 3.15 |
| 22000 | 301R223U6R3HS2 | 15.9 | 9.2 | 9.35 | 11.60 | .895 x 3.15 | 18000 | 301R183U7R5HS2 | 16.3 | 9.0 | 9.23 | 11.70 | .895 x 3.15 |
| 22000 | 301223U6R3JP2 | 23.0 | 15.6 | 7.66 | 8.75 | 1.02 x 2.65 | 22000 | 301223U7R5HT2 | 19.8 | 11.9 | 8.95 | 10.90 | .895 x 3.65 |
| 22000 | 301R223U6R3JP2 | 14.7 | 8.4 | 9.59 | 12.00 | 1.02 x 2.65 | 22000 | 301R223U7R5HT2 | 13.9 | 7.7 | 10.70 | 13.60 | .895 x 3.65 |
| 27000 | 301273U6R3HT2 | 19.4 | 11.9 | 9.04 | 10.90 | .895 x 3.65 | 22000 | 301223U7R5JP2 | 23.4 | 15.5 | 7.59 | 8.80 | 1.02 x 2.65 |
| 27000 | 301R273U6R3HT2 | 13.6 | 7.9 | 10.80 | 13.40 | .895 x 3.65 | 22000 | 301R223U7R5JP2 | 15.0 | 8.4 | 9.47 | 11.90 | 1.02 x 2.65 |
| 27000 | 301273U6R3JS2 | 19.2 | 13.0 | 9.11 | 10.40 | 1.02 x 3.15 | 27000 | 301273U7R5JS2 | 19.5 | 12.9 | 9.03 | 10.50 | 1.02 x 3.15 |
| 27000 | 301R273U6R3JS2 | 15.1 | 8.6 | 10.30 | 12.80 | 1.02 x 3.15 | 27000 | 301R273U7R5JS2 | 15.5 | 8.7 | 10.10 | 12.80 | 1.02 x 3.15 |
| 33000 | 301333U6R3JT2 | 16.7 | 11.4 | 10.50 | 12.00 | 1.02 x 3.65 | 33000 | 301333U7R5JT2 | 17.0 | 11.2 | 10.40 | 12.10 | 1.02 x 3.65 |
| 33000 | 301R333U6R3JT2 | 10.4 | 5.9 | 13.30 | 16.60 | 1.02 x 3.65 | 33000 | 301R333U7R5JT2 | 10.6 | 5.9 | 13.10 | 16.60 | 1.02 x 3.65 |

Type 300/301 –55 °C to 105 °C Long-Life, Switching Power Grade Radial High Capacitance and Ultra-Low ESR

| Cap. (µF) | Catalog Part Number | ESR MAX @ 25°C | | Ripple MAX @ 85°C | | Nom Size Insulated | Cap. (µF) | Catalog Part Number | ESR MAX @ 25°C | | Ripple MAX @ 85°C | | Nom Size Insulated |
|------------------------------|---------------------|--------------------|------|--------------------|-------|--------------------|------------------------------|---------------------|--------------------|------|--------------------|-------|--------------------|
| | | 120 Hz 20 kHz (mΩ) | | 120 Hz 20 kHz (mΩ) | | D x L (in) | | | 120 Hz 20 kHz (mΩ) | | 120 Hz 20 kHz (mΩ) | | D x L (in) |
| 10 Vdc (15 Vdc Surge) | | | | | | | 16 Vdc (25 Vdc Surge) | | | | | | |
| 1800 | 301182U010GE2 | 153.0 | 81.2 | 1.65 | 2.14 | .77 x 1.15 | 1500 | 301152U016GE2 | 159.0 | 80.9 | 1.62 | 2.14 | .77 x 1.15 |
| 1800 | 301R182U010GE2 | 133.0 | 70.3 | 1.77 | 2.30 | .77 x 1.15 | 1500 | 301R152U016GE2 | 138.0 | 70.1 | 1.74 | 2.30 | .77 x 1.15 |
| 3300 | 301R332U010HE2 | 106.0 | 61.8 | 2.17 | 2.69 | .895 x 1.15 | 2700 | 301272U016HE2 | 110.0 | 63.7 | 2.14 | 2.65 | .895 x 1.15 |
| 3300 | 301332U010HE2 | 92.3 | 50.8 | 2.33 | 2.97 | .895 x 1.15 | 2700 | 301R272U016HE2 | 95.2 | 52.4 | 2.30 | 2.92 | .895 x 1.15 |
| 3900 | 301392U010GJ2 | 77.6 | 41.1 | 2.56 | 3.31 | .77 x 1.65 | 3300 | 301332U016GJ2 | 80.4 | 41.0 | 2.51 | 3.32 | .77 x 1.65 |
| 3900 | 301R392U010GJ2 | 67.3 | 35.7 | 2.75 | 3.56 | .77 x 1.65 | 3300 | 301R332U016GJ2 | 69.7 | 35.5 | 2.70 | 3.56 | .77 x 1.65 |
| 4700 | 301472U010JE2 | 88.3 | 56.5 | 2.49 | 2.94 | 1.02 x 1.15 | 3300 | 301332U016JE2 | 90.7 | 56.2 | 2.46 | 2.94 | 1.02 x 1.15 |
| 4700 | 301R472U010JE2 | 76.5 | 42.8 | 2.68 | 3.37 | 1.02 x 1.15 | 3300 | 301R332U016JE2 | 78.6 | 41.6 | 2.64 | 3.42 | 1.02 x 1.15 |
| 5600 | 301562U010GL2 | 52.7 | 27.9 | 3.89 | 5.04 | .77 x 2.15 | 4700 | 301472U016GL2 | 54.5 | 27.8 | 3.82 | 5.05 | .77 x 2.15 |
| 5600 | 301R562U010GL2 | 45.6 | 24.2 | 4.18 | 5.41 | .77 x 2.15 | 4700 | 301R472U016GL2 | 47.2 | 24.1 | 4.11 | 5.42 | .77 x 2.15 |
| 6800 | 301682U010HJ2 | 54.3 | 31.5 | 3.60 | 4.46 | .895 x 1.65 | 4700 | 301472U016HJ2 | 56.0 | 32.5 | 3.55 | 4.39 | .895 x 1.65 |
| 6800 | 301R682U010HJ2 | 47.1 | 25.9 | 3.87 | 4.92 | .895 x 1.65 | 4700 | 301R472U016HJ2 | 48.5 | 26.7 | 3.81 | 4.84 | .895 x 1.65 |
| 8200 | 301822U010GP2 | 40.3 | 21.4 | 4.95 | 6.41 | .77 x 2.65 | 5600 | 301562U016GP2 | 41.7 | 21.3 | 4.87 | 6.43 | .77 x 2.65 |
| 8200 | 301R822U010GP2 | 34.9 | 18.5 | 5.32 | 6.89 | .77 x 2.65 | 5600 | 301R562U016GP2 | 36.1 | 18.4 | 5.23 | 6.90 | .77 x 2.65 |
| 8200 | 301822U010JJ2 | 45.2 | 28.9 | 4.28 | 5.05 | 1.02 x 1.65 | 6800 | 301682U016HL2 | 38.2 | 22.2 | 4.97 | 6.15 | .895 x 2.15 |
| 8200 | 301R822U010JJ2 | 39.2 | 21.9 | 4.60 | 5.80 | 1.02 x 1.65 | 6800 | 301R682U016HL2 | 28.3 | 15.6 | 5.78 | 7.35 | .895 x 2.15 |
| 10000 | 301103U010GS2 | 33.0 | 17.5 | 5.97 | 7.73 | .77 x 3.15 | 6800 | 301682U016JJ2 | 46.4 | 28.8 | 4.23 | 5.06 | 1.02 x 1.65 |
| 10000 | 301R103U010GS2 | 28.6 | 15.2 | 6.41 | 8.31 | .77 x 3.15 | 6800 | 301R682U016JJ2 | 40.2 | 21.3 | 4.54 | 5.88 | 1.02 x 1.65 |
| 10000 | 301103U010HL2 | 37.1 | 21.5 | 5.05 | 6.25 | .895 x 2.15 | 8200 | 301822U016GS2 | 34.1 | 17.4 | 5.87 | 7.75 | .77 x 3.15 |
| 10000 | 301R103U010HL2 | 27.3 | 15.0 | 5.88 | 7.48 | .895 x 2.15 | 8200 | 301R822U016GS2 | 29.6 | 15.1 | 6.31 | 8.33 | .77 x 3.15 |
| 12000 | 301123U010GT2 | 28.3 | 15.0 | 6.88 | 8.91 | .77 x 3.65 | 10000 | 301103U016GT2 | 29.2 | 14.9 | 6.77 | 8.94 | .77 x 3.65 |
| 12000 | 301R123U010GT2 | 24.5 | 13.0 | 7.39 | 9.57 | .77 x 3.65 | 10000 | 301R103U016GT2 | 25.3 | 12.9 | 7.27 | 9.60 | .77 x 3.65 |
| 12000 | 301123U010HP2 | 28.7 | 16.6 | 6.39 | 7.91 | .895 x 2.65 | 10000 | 301103U016HP2 | 29.5 | 17.1 | 6.30 | 7.79 | .895 x 2.65 |
| 12000 | 301R123U010HP2 | 20.8 | 11.5 | 7.49 | 9.53 | .895 x 2.65 | 10000 | 301R103U016HP2 | 21.6 | 11.9 | 7.36 | 9.36 | .895 x 2.65 |
| 12000 | 301123U010JL2 | 31.0 | 19.9 | 5.93 | 6.99 | 1.02 x 2.15 | 10000 | 301103U016JL2 | 31.8 | 19.7 | 5.86 | 7.01 | 1.02 x 2.15 |
| 12000 | 301R123U010JL2 | 20.3 | 11.4 | 7.33 | 9.23 | 1.02 x 2.15 | 10000 | 301R103U016JL2 | 21.0 | 11.1 | 7.21 | 9.33 | 1.02 x 2.15 |
| 15000 | 301153U010HS2 | 23.7 | 13.7 | 7.66 | 9.49 | .895 x 3.15 | 12000 | 301123U016HS2 | 24.4 | 14.1 | 7.55 | 9.35 | .895 x 3.15 |
| 15000 | 301R153U010HS2 | 17.0 | 9.3 | 9.05 | 11.50 | .895 x 3.15 | 12000 | 301R123U016HS2 | 17.6 | 9.7 | 8.89 | 11.30 | .895 x 3.15 |
| 18000 | 301183U010HT2 | 20.5 | 11.9 | 8.81 | 10.90 | .895 x 3.65 | 15000 | 301153U016HT2 | 21.1 | 12.2 | 8.69 | 10.80 | .895 x 3.65 |
| 18000 | 301R183U010HT2 | 14.5 | 8.0 | 10.50 | 13.30 | .895 x 3.65 | 15000 | 301R153U016HT2 | 15.0 | 8.2 | 10.30 | 13.10 | .895 x 3.65 |
| 18000 | 301183U010JP2 | 24.1 | 15.4 | 7.48 | 8.81 | 1.02 x 2.65 | 15000 | 301153U016JP2 | 24.7 | 15.3 | 7.39 | 8.85 | 1.02 x 2.65 |
| 18000 | 301R183U010JP2 | 15.6 | 8.7 | 9.29 | 11.70 | 1.02 x 2.65 | 15000 | 301R153U016JP2 | 16.1 | 8.5 | 9.14 | 11.80 | 1.02 x 2.65 |
| 22000 | 301223U010JS2 | 20.1 | 12.8 | 8.90 | 10.50 | 1.02 x 3.15 | 18000 | 301183U016JS2 | 20.5 | 12.7 | 8.80 | 10.50 | 1.02 x 3.15 |
| 22000 | 301R223U010JS2 | 16.1 | 9.0 | 9.94 | 12.50 | 1.02 x 3.15 | 18000 | 301R183U016JS2 | 16.6 | 8.8 | 9.79 | 12.70 | 1.02 x 3.15 |
| 27000 | 301273U010JT2 | 17.5 | 11.2 | 10.30 | 12.10 | 1.02 x 3.65 | 22000 | 301223U016JT2 | 17.9 | 11.1 | 10.10 | 12.10 | 1.02 x 3.65 |
| 27000 | 301R273U010JT2 | 11.0 | 6.2 | 12.90 | 16.30 | 1.02 x 3.65 | 22000 | 301R223U016JT2 | 11.4 | 6.0 | 12.70 | 16.50 | 1.02 x 3.65 |

Type 300/301 –55 °C to 105 °C Long-Life, Switching Power Grade Radial High Capacitance and Ultra-Low ESR

| Cap. (µF) | Catalog Part Number | ESR MAX @ 25°C | | Ripple MAX @ 85°C | | Nom Size Insulated D x L (in) | Cap. (µF) | Catalog Part Number | ESR MAX @ 25°C | | Ripple MAX @ 85°C | | Nom Size Insulated D x L (in) |
|------------------------------|------------------------|-------------------|--------|----------------------|--------|----------------------------------------|------------------------------|------------------------|-------------------|--------|----------------------|--------|----------------------------------------|
| | | 120 Hz | 20 kHz | 120 Hz | 20 kHz | | | | 120 Hz | 20 kHz | 120 Hz | 20 kHz | |
| 20 Vdc (30 Vdc Surge) | | | | | | | 25 Vdc (35 Vdc Surge) | | | | | | |
| 1200 | 301122U020GE2 | 159.0 | 80.9 | 1.62 | 2.14 | .77 x 1.15 | 1000 | 301102U025GE2 | 170.0 | 81.8 | 1.57 | 2.13 | .77 x 1.15 |
| 1200 | 301R122U020GE2 | 138.0 | 70.1 | 1.74 | 2.30 | .77 x 1.15 | 1000 | 301R102U025GE2 | 148.0 | 70.9 | 1.68 | 2.29 | .77 x 1.15 |
| 2200 | 301222U020HE2 | 110.0 | 61.5 | 2.14 | 2.70 | .895 x 1.15 | 1800 | 301182U025HE2 | 117.0 | 62.1 | 2.07 | 2.68 | .895 x 1.15 |
| 2200 | 301R222U020HE2 | 95.2 | 53.3 | 2.30 | 2.90 | .895 x 1.15 | 1800 | 301R182U025HE2 | 102.0 | 47.7 | 2.23 | 3.06 | .895 x 1.15 |
| 2700 | 301272U020GJ2 | 80.4 | 41.0 | 2.51 | 3.32 | .77 x 1.65 | 2200 | 301222U025GJ2 | 86.3 | 41.4 | 2.42 | 3.30 | .77 x 1.65 |
| 2700 | 301R272U020GJ2 | 69.7 | 35.5 | 2.70 | 3.56 | .77 x 1.65 | 2200 | 301R222U025GJ2 | 74.8 | 35.9 | 2.60 | 3.54 | .77 x 1.65 |
| 2700 | 301272U020JE2 | 90.7 | 57.1 | 2.46 | 2.92 | 1.02 x 1.15 | 2700 | 301272U025JE2 | 95.8 | 57.5 | 2.39 | 2.91 | 1.02 x 1.15 |
| 2700 | 301R272U020JE2 | 78.6 | 49.5 | 2.64 | 3.14 | 1.02 x 1.15 | 2700 | 301R272U025JE2 | 83.0 | 41.5 | 2.57 | 3.42 | 1.02 x 1.15 |
| 3900 | 301392U020GL2 | 54.5 | 27.8 | 3.82 | 5.05 | .77 x 2.15 | 3300 | 301332U025GL2 | 58.4 | 28.1 | 3.69 | 5.02 | .77 x 2.15 |
| 3900 | 301R392U020GL2 | 47.2 | 24.1 | 4.11 | 5.42 | .77 x 2.15 | 3300 | 301R332U025GL2 | 50.6 | 24.3 | 3.97 | 5.40 | .77 x 2.15 |
| 3900 | 301392U020HJ2 | 56.0 | 31.4 | 3.55 | 4.47 | .895 x 1.65 | 3300 | 301332U025HJ2 | 59.7 | 31.6 | 3.44 | 4.45 | .895 x 1.65 |
| 3900 | 301R392U020HJ2 | 48.5 | 27.2 | 3.81 | 4.80 | .895 x 1.65 | 3300 | 301R332U025HJ2 | 51.7 | 24.3 | 3.69 | 5.07 | .895 x 1.65 |
| 4700 | 301472U020GP2 | 41.7 | 21.3 | 4.87 | 6.43 | .77 x 2.65 | 4700 | 301472U025GP2 | 44.7 | 21.4 | 4.71 | 6.40 | .77 x 2.65 |
| 4700 | 301R472U020GP2 | 36.1 | 18.4 | 5.23 | 6.90 | .77 x 2.65 | 4700 | 301R472U025GP2 | 38.7 | 18.6 | 5.05 | 6.88 | .77 x 2.65 |
| 5600 | 301562U020JJ2 | 46.4 | 29.2 | 4.23 | 5.02 | 1.02 x 1.65 | 4700 | 301472U025JJ2 | 48.9 | 29.4 | 4.12 | 5.01 | 1.02 x 1.65 |
| 5600 | 301R562U020JJ2 | 40.2 | 21.3 | 4.54 | 5.88 | 1.02 x 1.65 | 4700 | 301R472U025JJ2 | 42.4 | 21.2 | 4.42 | 5.90 | 1.02 x 1.65 |
| 6800 | 301682U020GS2 | 34.1 | 17.4 | 5.87 | 7.75 | .77 x 3.15 | 5600 | 301562U025GS2 | 36.5 | 17.5 | 5.68 | 7.73 | .77 x 3.15 |
| 6800 | 301R682U020GS2 | 29.6 | 15.1 | 6.31 | 8.33 | .77 x 3.15 | 5600 | 301R562U025GS2 | 31.6 | 15.2 | 6.10 | 8.30 | .77 x 3.15 |
| 6800 | 301682U020HL2 | 38.2 | 21.4 | 4.97 | 6.26 | .895 x 2.15 | 5600 | 301562U025HL2 | 42.0 | 22.3 | 4.74 | 6.14 | .895 x 2.15 |
| 6800 | 301R682U020HL2 | 28.3 | 15.8 | 5.78 | 7.28 | .895 x 2.15 | 5600 | 301R562U025HL2 | 30.4 | 14.3 | 5.58 | 7.67 | .895 x 2.15 |
| 8200 | 301822U020GT2 | 29.2 | 14.9 | 6.77 | 8.94 | .77 x 3.65 | 6800 | 301682U025GT2 | 31.2 | 15.0 | 6.55 | 8.91 | .77 x 3.65 |
| 8200 | 301R822U020GT2 | 25.3 | 12.9 | 7.27 | 9.60 | .77 x 3.65 | 6800 | 301R682U025GT2 | 27.0 | 13.0 | 7.04 | 9.58 | .77 x 3.65 |
| 8200 | 301822U020HP2 | 29.5 | 16.5 | 6.30 | 7.93 | .895 x 2.65 | 6800 | 301682U025HP2 | 31.3 | 16.6 | 6.11 | 7.91 | .895 x 2.65 |
| 8200 | 301R822U020HP2 | 21.6 | 12.1 | 7.36 | 9.28 | .895 x 2.65 | 6800 | 301R682U025HP2 | 23.1 | 10.9 | 7.11 | 9.77 | .895 x 2.65 |
| 8200 | 301822U020JL2 | 31.8 | 20.1 | 5.86 | 6.96 | 1.02 x 2.15 | 6800 | 301682U025JL2 | 33.5 | 20.1 | 5.71 | 6.94 | 1.02 x 2.15 |
| 8200 | 301R822U020JL2 | 21.0 | 11.1 | 7.21 | 9.33 | 1.02 x 2.15 | 6800 | 301R682U025JL2 | 22.5 | 11.3 | 6.96 | 9.29 | 1.02 x 2.15 |
| 10000 | 301103U020HS2 | 24.4 | 13.7 | 7.55 | 9.52 | .895 x 3.15 | 8200 | 301822U025HS2 | 25.8 | 13.7 | 7.34 | 9.50 | .895 x 3.15 |
| 10000 | 301R103U020HS2 | 17.6 | 9.8 | 8.89 | 11.20 | .895 x 3.15 | 8200 | 301R822U025HS2 | 18.9 | 8.9 | 8.59 | 11.81 | .895 x 3.15 |
| 12000 | 301123U020HT2 | 21.1 | 11.8 | 8.69 | 10.90 | .895 x 3.65 | 10000 | 301103U025HT2 | 22.3 | 11.8 | 8.45 | 10.94 | .895 x 3.65 |
| 12000 | 301R123U020HT2 | 15.0 | 8.4 | 10.30 | 13.00 | .895 x 3.65 | 10000 | 301R103U025HT2 | 16.0 | 7.5 | 9.96 | 13.69 | .895 x 3.65 |
| 12000 | 301123U020JP2 | 24.7 | 15.6 | 7.39 | 8.77 | 1.02 x 2.65 | 10000 | 301103U025JP2 | 26.0 | 15.6 | 7.20 | 8.77 | 1.02 x 2.65 |
| 12000 | 301R123U020JP2 | 16.1 | 8.5 | 9.14 | 11.80 | 1.02 x 2.65 | 10000 | 301R103U025JP2 | 17.2 | 8.6 | 8.84 | 11.80 | 1.02 x 2.65 |
| 15000 | 301153U020JS2 | 20.5 | 12.9 | 8.80 | 10.50 | 1.02 x 3.15 | 12000 | 301123U025JS2 | 21.6 | 12.9 | 8.59 | 10.50 | 1.02 x 3.15 |
| 15000 | 301R153U020JS2 | 13.2 | 7.0 | 11.00 | 14.20 | 1.02 x 3.15 | 12000 | 301R123U025JS2 | 14.1 | 7.1 | 10.60 | 14.10 | 1.02 x 3.15 |
| 18000 | 301183U020JT2 | 17.9 | 11.2 | 10.10 | 12.00 | 1.02 x 3.65 | 15000 | 301153U025JT2 | 18.7 | 11.2 | 9.90 | 12.10 | 1.02 x 3.65 |
| 18000 | 301R183U020JT2 | 11.4 | 6.0 | 12.70 | 16.50 | 1.02 x 3.65 | 15000 | 301R153U025JT2 | 12.1 | 6.0 | 12.30 | 16.40 | 1.02 x 3.65 |

Type 300/301 –55 °C to 105 °C Long-Life, Switching Power Grade Radial

High Capacitance and Ultra-Low ESR

| Cap. (µF) | Catalog Part Number | ESR MAX @ 25°C | | Ripple MAX @ 85°C | | Nom Size Insulated D x L (in) |
|------------------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------------|
| | | 120 Hz 20 kHz (mΩ) | 120 Hz 20 kHz (mΩ) | 120 Hz 20 kHz (mΩ) | 120 Hz 20 kHz (mΩ) | |
| 40 Vdc (60 Vdc Surge) | | | | | | |
| 1200 | 301122U040HE2 | 137.0 | 65.6 | 1.92 | 2.61 | .895 x 1.15 |
| 1200 | 301R122U040HE2 | 118.0 | 52.1 | 2.06 | 2.93 | .895 x 1.15 |
| 1500 | 301152U040JE2 | 109.0 | 60.2 | 2.24 | 2.84 | 1.02 x 1.15 |
| 1500 | 301R152U040JE2 | 94.8 | 43.6 | 2.40 | 3.34 | 1.02 x 1.15 |
| 2200 | 301222U040HJ2 | 69.4 | 33.3 | 3.18 | 4.33 | .895 x 1.65 |
| 2200 | 301R222U040HJ2 | 60.2 | 26.5 | 3.42 | 4.86 | .895 x 1.65 |
| 3300 | 301332U040HL2 | 47.2 | 22.6 | 4.48 | 6.09 | .895 x 2.15 |
| 3300 | 301R332U040HL2 | 36.0 | 15.8 | 5.12 | 7.28 | .895 x 2.15 |
| 3300 | 301332U040JJ2 | 55.8 | 30.7 | 3.86 | 4.90 | 1.02 x 1.65 |
| 3300 | 301R332U040JJ2 | 48.3 | 22.2 | 4.14 | 5.76 | 1.02 x 1.65 |
| 3900 | 301R392U040GS2 | 37.1 | 16.7 | 5.63 | 7.92 | .77 x 3.15 |
| 4700 | 301472U040GT2 | 36.4 | 16.4 | 6.06 | 8.52 | .77 x 3.65 |
| 4700 | 301R472U040GT2 | 31.6 | 14.2 | 6.51 | 9.15 | .77 x 3.65 |
| 4700 | 301472U040HP2 | 36.2 | 17.4 | 5.68 | 7.73 | .895 x 2.65 |
| 4700 | 301R472U040HP2 | 27.4 | 12.0 | 6.54 | 9.29 | .895 x 2.65 |
| 4700 | 301472U040JL2 | 38.1 | 20.9 | 5.35 | 6.81 | 1.02 x 2.15 |
| 4700 | 301R472U040JL2 | 26.5 | 12.2 | 6.42 | 8.93 | 1.02 x 2.15 |
| 5600 | 301562U040HS2 | 29.7 | 14.3 | 6.84 | 9.31 | .895 x 3.15 |
| 5600 | 301R562U040HS2 | 22.2 | 9.8 | 7.91 | 11.20 | .895 x 3.15 |
| 6800 | 301682U040HT2 | 25.5 | 12.3 | 7.89 | 10.70 | .895 x 3.65 |
| 6800 | 301R682U040HT2 | 18.9 | 8.3 | 9.18 | 13.10 | .895 x 3.65 |
| 6800 | 301682U040JP2 | 29.4 | 16.2 | 6.77 | 8.61 | 1.02 x 2.65 |
| 6800 | 301R682U040JP2 | 20.2 | 9.3 | 8.17 | 11.40 | 1.02 x 2.65 |
| 8200 | 301822U040JS2 | 24.3 | 13.4 | 8.09 | 10.30 | 1.02 x 3.15 |
| 8200 | 301R822U040JS2 | 16.5 | 7.6 | 9.82 | 13.60 | 1.02 x 3.15 |
| 10000 | 301103U040JT2 | 21.0 | 11.5 | 9.35 | 11.90 | 1.02 x 3.65 |
| 10000 | 301R103U040JT2 | 14.1 | 6.5 | 11.40 | 15.90 | 1.02 x 3.65 |
| 50 Vdc (75 Vdc Surge) | | | | | | |
| 560 | 301R561U050GE2 | 216.0 | 88.6 | 1.39 | 2.05 | .77 x 1.15 |
| 560 | 301561U050GE2 | 249.0 | 102.0 | 1.29 | 1.91 | .77 x 1.15 |
| 1200 | 301R122U050GJ2 | 109.0 | 44.7 | 2.16 | 3.18 | .77 x 1.65 |
| 1200 | 301122U050GJ2 | 126.0 | 51.6 | 2.01 | 2.96 | .77 x 1.65 |
| 1200 | 301122U050JE2 | 130.0 | 62.4 | 2.05 | 2.79 | 1.02 x 1.15 |
| 1200 | 301R122U050JE2 | 113.0 | 43.9 | 2.21 | 3.33 | 1.02 x 1.15 |
| 1500 | 301R152U050GL2 | 73.4 | 30.1 | 3.29 | 4.85 | .77 x 2.15 |
| 1500 | 301152U050GL2 | 84.7 | 34.7 | 3.07 | 4.52 | .77 x 2.15 |
| 1800 | 301182U050HJ2 | 84.0 | 34.5 | 2.89 | 4.26 | .895 x 1.65 |
| 1800 | 301R182U050HJ2 | 72.8 | 26.2 | 3.11 | 4.89 | .895 x 1.65 |
| 2200 | 301R222U050GP2 | 55.8 | 22.9 | 4.21 | 6.20 | .77 x 2.65 |
| 2200 | 301222U050GP2 | 64.4 | 26.4 | 3.92 | 5.77 | .77 x 2.65 |
| 2700 | 301R272U050GS2 | 45.3 | 18.6 | 5.10 | 7.51 | .77 x 3.15 |
| 2700 | 301272U050GS2 | 52.3 | 21.4 | 4.75 | 6.99 | .77 x 3.15 |
| 2700 | 301272U050HL2 | 56.9 | 23.3 | 4.07 | 6.00 | .895 x 2.15 |
| 2700 | 301R272U050HL2 | 44.5 | 16.0 | 4.61 | 7.24 | .895 x 2.15 |
| 2700 | 301272U050JJ2 | 66.0 | 31.7 | 3.54 | 4.82 | 1.02 x 1.65 |
| 2700 | 301R272U050JJ2 | 57.2 | 22.3 | 3.81 | 5.75 | 1.02 x 1.65 |
| 3300 | 301R332U050GT2 | 38.4 | 15.7 | 5.90 | 8.69 | .77 x 3.65 |
| 3300 | 301332U050GT2 | 44.3 | 18.2 | 5.49 | 8.09 | .77 x 3.65 |
| 3300 | 301332U050HP2 | 43.5 | 17.8 | 5.18 | 7.63 | .895 x 2.65 |
| 3300 | 301R332U050HP2 | 33.7 | 12.1 | 5.89 | 9.26 | .895 x 2.65 |
| 3900 | 301392U050JL2 | 44.9 | 21.6 | 4.93 | 6.71 | 1.02 x 2.15 |
| 3900 | 301R392U050JL2 | 32.4 | 12.6 | 5.81 | 8.77 | 1.02 x 2.15 |
| 4700 | 301472U050HS2 | 35.6 | 14.6 | 6.25 | 9.21 | .895 x 3.15 |
| 4700 | 301R472U050HS2 | 27.3 | 9.8 | 7.14 | 11.20 | .895 x 3.15 |
| 5600 | 301562U050HT2 | 30.4 | 12.5 | 7.23 | 10.60 | .895 x 3.65 |
| 5600 | 301R562U050HT2 | 23.1 | 8.3 | 8.30 | 13.00 | .895 x 3.65 |
| 5600 | 301562U050JP2 | 34.5 | 16.6 | 6.25 | 8.50 | 1.02 x 2.65 |
| 5600 | 301R562U050JP2 | 24.6 | 9.6 | 7.40 | 11.20 | 1.02 x 2.65 |
| 6800 | 301682U050JS2 | 28.4 | 13.6 | 7.48 | 10.20 | 1.02 x 3.15 |
| 6800 | 301R682U050JS2 | 20.0 | 7.8 | 8.91 | 13.40 | 1.02 x 3.15 |
| 8200 | 301822U050JT2 | 24.4 | 11.7 | 8.67 | 11.80 | 1.02 x 3.65 |
| 8200 | 301R822U050JT2 | 17.0 | 6.6 | 10.40 | 15.70 | 1.02 x 3.65 |
| 63 Vdc (90 Vdc Surge) | | | | | | |
| 390 | 301391U063GE2 | 281.0 | 92.7 | 1.22 | 2.00 | .77 x 1.15 |
| 390 | 301R391U063GE2 | 243.0 | 80.3 | 1.31 | 2.15 | .77 x 1.15 |
| 680 | 301681U063HE2 | 185.0 | 70.5 | 1.65 | 2.52 | .895 x 1.15 |
| 680 | 301R681U063HE2 | 161.0 | 53.0 | 1.77 | 2.90 | .895 x 1.15 |
| 820 | 301821U063GJ2 | 142.0 | 46.7 | 1.89 | 3.11 | .77 x 1.65 |
| 820 | 301R821U063GJ2 | 123.0 | 40.5 | 2.03 | 3.34 | .77 x 1.65 |
| 1000 | 301102U063JE2 | 144.0 | 63.2 | 1.95 | 2.78 | 1.02 x 1.15 |
| 1000 | 301R102U063JE2 | 124.0 | 43.5 | 2.10 | 3.34 | 1.02 x 1.15 |
| 1200 | 301122U063GL2 | 95.2 | 31.4 | 2.89 | 4.75 | .77 x 2.15 |
| 1200 | 301R122U063GL2 | 82.5 | 27.2 | 3.11 | 5.10 | .77 x 2.15 |
| 1200 | 301122U063HJ2 | 93.8 | 35.6 | 2.74 | 4.19 | .895 x 1.65 |
| 1200 | 301R122U063HJ2 | 81.3 | 26.8 | 2.94 | 4.83 | .895 x 1.65 |

Type 300/301 –55 °C to 105 °C Long-Life, Switching Power Grade Radial

High Capacitance and Ultra-Low ESR

| Cap. (µF) | Catalog Part Number | ESR MAX @ 25°C 120 Hz 20 kHz (mΩ) | | Ripple MAX @ 85°C 120 Hz 20 kHz (mΩ) | | Nom Size Insulated D x L (in) |
|--------------------------------|------------------------|--------------------------------------------|-------|-----------------------------------------------|-------|----------------------------------------|
| 63 Vdc (90 Vdc Surge) | | | | | | |
| 1500 | 301152U063GP2 | 72.3 | 23.8 | 3.70 | 6.07 | .77 x 2.65 |
| 1500 | 301R152U063GP2 | 62.6 | 20.7 | 3.97 | 6.52 | .77 x 2.65 |
| 1800 | 301182U063HL2 | 63.4 | 24.1 | 3.86 | 5.90 | .895 x 2.15 |
| 1800 | 301R182U063HL2 | 50.1 | 16.5 | 4.34 | 7.13 | .895 x 2.15 |
| 1800 | 301182U063JJ2 | 72.8 | 32.0 | 3.37 | 4.80 | 1.02 x 1.65 |
| 1800 | 301R182U063JJ2 | 63.1 | 22.1 | 3.62 | 5.78 | 1.02 x 1.65 |
| 2200 | 301222U063GS2 | 58.6 | 19.3 | 4.48 | 7.36 | .77 x 3.15 |
| 2200 | 301R222U063GS2 | 50.8 | 16.8 | 4.82 | 7.90 | .77 x 3.15 |
| 2200 | 301222U063GT2 | 49.6 | 16.4 | 5.19 | 8.53 | .77 x 3.65 |
| 2200 | 301R222U063GT2 | 43.0 | 14.2 | 5.58 | 9.16 | .77 x 3.65 |
| 2700 | 301272U063HP2 | 48.4 | 18.4 | 4.92 | 7.52 | .895 x 2.65 |
| 2700 | 301R272U063HP2 | 37.9 | 12.5 | 5.55 | 9.11 | .895 x 2.65 |
| 2700 | 301272U063JL2 | 49.5 | 21.8 | 4.70 | 6.68 | 1.02 x 2.15 |
| 2700 | 301R272U063JL2 | 36.3 | 12.7 | 5.48 | 8.74 | 1.02 x 2.15 |
| 3300 | 301332U063HS2 | 39.5 | 15.0 | 5.94 | 9.08 | .895 x 3.15 |
| 3300 | 301R332U063HS2 | 30.7 | 10.1 | 6.73 | 11.10 | .895 x 3.15 |
| 3900 | 301392U063HT2 | 33.7 | 12.8 | 6.87 | 10.50 | .895 x 3.65 |
| 3900 | 301R392U063HT2 | 25.9 | 8.5 | 7.84 | 12.90 | .895 x 3.65 |
| 3900 | 301392U063JP2 | 37.9 | 16.7 | 5.96 | 8.47 | 1.02 x 2.65 |
| 3900 | 301R392U063JP2 | 27.6 | 9.7 | 6.99 | 11.10 | 1.02 x 2.65 |
| 4700 | 301472U063JS2 | 31.1 | 13.7 | 7.15 | 10.20 | 1.02 x 3.15 |
| 4700 | 301R472U063JS2 | 22.4 | 7.8 | 8.42 | 13.40 | 1.02 x 3.15 |
| 5600 | 301562U063JT2 | 26.7 | 11.7 | 8.30 | 11.80 | 1.02 x 3.65 |
| 5600 | 301R562U063JT2 | 19.0 | 6.6 | 9.83 | 15.70 | 1.02 x 3.65 |
| 75 Vdc (100 Vdc Surge) | | | | | | |
| 330 | 301331U075GE2 | 360.0 | 155.0 | 1.08 | 1.55 | .77 x 1.15 |
| 330 | 301R331U075GE2 | 312.0 | 134.0 | 1.16 | 1.66 | .77 x 1.15 |
| 470 | 301471U075HE2 | 234.0 | 108.0 | 1.47 | 2.04 | .895 x 1.15 |
| 470 | 301R471U075HE2 | 203.0 | 87.3 | 1.57 | 2.26 | .895 x 1.15 |
| 560 | 301561U075GJ2 | 181.0 | 77.8 | 1.67 | 2.41 | .77 x 1.65 |
| 560 | 301R561U075GJ2 | 157.0 | 67.4 | 1.80 | 2.59 | .77 x 1.65 |
| 680 | 301681U075JE2 | 178.0 | 88.8 | 1.76 | 2.34 | 1.02 x 1.15 |
| 680 | 301R681U075JE2 | 154.0 | 67.7 | 1.89 | 2.68 | 1.02 x 1.15 |
| 1000 | 301102U075GL2 | 122.0 | 52.3 | 2.56 | 3.68 | .77 x 2.15 |
| 1000 | 301R102U075GL2 | 105.0 | 45.3 | 2.75 | 3.95 | .77 x 2.15 |
| 1000 | 301102U075HJ2 | 118.0 | 54.3 | 2.44 | 3.39 | .895 x 1.65 |
| 1000 | 301R102U075HJ2 | 102.0 | 44.0 | 2.62 | 3.77 | .895 x 1.65 |
| 100 Vdc (140 Vdc Surge) | | | | | | |
| 150 | 301151U100GE2 | 581.0 | 221.0 | 0.85 | 1.30 | .77 x 1.15 |
| 150 | 301R151U100GE2 | 503.0 | 191.0 | 0.91 | 1.39 | .77 x 1.15 |
| 220 | 301221U100HE2 | 371.0 | 141.0 | 1.16 | 1.78 | .895 x 1.15 |
| 220 | 301R221U100HE2 | 321.0 | 122.0 | 1.25 | 1.91 | .895 x 1.15 |
| 270 | 301271U100GJ2 | 291.0 | 111.0 | 1.32 | 2.02 | .77 x 1.65 |
| 270 | 301R271U100GJ2 | 252.0 | 95.9 | 1.42 | 2.17 | .77 x 1.65 |
| 330 | 301331U100JE2 | 273.0 | 109.0 | 1.42 | 2.11 | 1.02 x 1.15 |
| 330 | 301R331U100JE2 | 237.0 | 92.3 | 1.52 | 2.30 | 1.02 x 1.15 |
| 470 | 301471U100GL2 | 195.0 | 74.1 | 2.02 | 3.09 | .77 x 2.15 |
| 470 | 301R471U100GL2 | 169.0 | 64.3 | 2.17 | 3.32 | .77 x 2.15 |
| 470 | 301471U100HJ2 | 186.0 | 70.8 | 1.94 | 2.97 | .895 x 1.65 |
| 470 | 301R471U100HJ2 | 162.0 | 61.4 | 2.09 | 3.19 | .895 x 1.65 |
| 560 | 301561U100GP2 | 147.0 | 55.9 | 2.59 | 3.96 | .77 x 2.65 |

Type 300/301 –55 °C to 105 °C Long-Life, Switching Power Grade Radial High Capacitance and Ultra-Low ESR

| Cap. (µF) | Catalog Part Number | ESR MAX @ 25°C | | Ripple MAX @ 85°C | | Nom Size Insulated D x L (in) |
|--------------------------------|---------------------|--------------------|--------------------|--------------------|--------------------|-------------------------------|
| | | 120 Hz 20 kHz (mΩ) | 120 Hz 20 kHz (mΩ) | 120 Hz 20 kHz (mΩ) | 120 Hz 20 kHz (mΩ) | |
| 100 Vdc (140 Vdc Surge) | | | | | | |
| 560 | 301R561U100GP2 | 128.0 | 48.5 | 2.78 | 4.26 | .77 x 2.65 |
| 680 | 301681U100GS2 | 119.0 | 45.0 | 3.15 | 4.82 | .77 x 3.15 |
| 680 | 301R681U100GS2 | 103.0 | 39.0 | 3.39 | 5.18 | .77 x 3.15 |
| 680 | 301681U100HL2 | 125.0 | 47.6 | 2.75 | 4.20 | .895 x 2.15 |
| 680 | 301R681U100HL2 | 104.0 | 39.4 | 3.02 | 4.62 | .895 x 2.15 |
| 680 | 301681U100JJ2 | 138.0 | 55.1 | 2.45 | 3.66 | 1.02 x 1.65 |
| 680 | 301R681U100JJ2 | 119.0 | 46.5 | 2.64 | 3.98 | 1.02 x 1.65 |
| 820 | 301821U100GT2 | 99.5 | 37.8 | 3.67 | 5.61 | .77 x 3.65 |
| 820 | 301R821U100GT2 | 86.2 | 32.8 | 3.94 | 6.02 | .77 x 3.65 |
| 1000 | 301102U100HP2 | 94.7 | 36.0 | 3.51 | 5.38 | .895 x 2.65 |
| 1000 | 301R102U100HP2 | 78.1 | 29.7 | 3.87 | 5.92 | .895 x 2.65 |
| 1000 | 301102U100JL2 | 92.7 | 37.1 | 3.43 | 5.12 | 1.02 x 2.15 |
| 1000 | 301R102U100JL2 | 73.8 | 28.8 | 3.85 | 5.81 | 1.02 x 2.15 |
| 1200 | 301122U100HS2 | 76.5 | 29.1 | 4.26 | 6.52 | .895 x 3.15 |
| 1200 | 301R122U100HS2 | 62.8 | 23.9 | 4.71 | 7.20 | .895 x 3.15 |
| 1200 | 301122U100HT2 | 64.5 | 24.5 | 4.96 | 7.59 | .895 x 3.65 |
| 1200 | 301R122U100HT2 | 52.6 | 20.0 | 5.50 | 8.41 | .895 x 3.65 |
| 1200 | 301122U100JP2 | 70.3 | 28.1 | 4.38 | 6.53 | 1.02 x 2.65 |
| 1200 | 301R122U100JP2 | 55.7 | 21.7 | 4.92 | 7.43 | 1.02 x 2.65 |
| 1500 | 301152U100JS2 | 57.0 | 22.8 | 5.28 | 7.87 | 1.02 x 3.15 |
| 1500 | 301R152U100JS2 | 44.9 | 17.5 | 5.95 | 8.99 | 1.02 x 3.15 |
| 2200 | 301222U100JT2 | 48.3 | 19.3 | 6.17 | 9.19 | 1.02 x 3.65 |
| 2200 | 301R222U100JT2 | 37.7 | 14.7 | 6.97 | 10.50 | 1.02 x 3.65 |
| 160 Vdc (200 Vdc Surge) | | | | | | |
| 56 | 301560T160GE2 | 1817.0 | 690.0 | 0.48 | 0.73 | .77 x 1.15 |
| 82 | 301820T160HE2 | 1169.0 | 444.0 | 0.66 | 1.00 | .895 x 1.15 |
| 100 | 301101T160GJ2 | 1019.0 | 387.0 | 0.71 | 1.08 | .77 x 1.65 |
| 120 | 301121T160JE2 | 904.0 | 362.0 | 0.78 | 1.16 | 1.02 x 1.15 |
| 150 | 301151T160GL2 | 608.0 | 231.0 | 1.15 | 1.75 | .77 x 2.15 |
| 180 | 301181T160HJ2 | 586.0 | 222.0 | 1.10 | 1.68 | .895 x 1.65 |
| 220 | 301221T160GP2 | 457.0 | 174.0 | 1.47 | 2.25 | .77 x 2.65 |
| 270 | 301271T160GS2 | 366.0 | 139.0 | 1.79 | 2.74 | .77 x 3.15 |
| 270 | 301271T160HL2 | 391.0 | 149.0 | 1.55 | 2.38 | .895 x 2.15 |
| 270 | 301271T160JJ2 | 415.0 | 166.0 | 1.41 | 2.11 | 1.02 x 1.65 |
| 330 | 301331T160GT2 | 306.0 | 116.0 | 2.09 | 3.20 | .77 x 3.65 |
| 390 | 301391T160HP2 | 268.0 | 102.0 | 2.09 | 3.19 | .895 x 2.65 |
| 390 | 301391T160JL2 | 278.0 | 111.0 | 1.98 | 2.95 | 1.02 x 2.15 |
| 470 | 301471T160HS2 | 226.0 | 85.7 | 2.48 | 3.80 | .895 x 3.15 |
| 470 | 301471T160JP2 | 228.0 | 91.4 | 2.43 | 3.62 | 1.02 x 2.65 |

| Cap. (µF) | Catalog Part Number | ESR MAX @ 25°C | | Ripple MAX @ 85°C | | Nom Size Insulated D x L (in) |
|--------------------------------|---------------------|--------------------|--------------------|--------------------|--------------------|-------------------------------|
| | | 120 Hz 20 kHz (mΩ) | 120 Hz 20 kHz (mΩ) | 120 Hz 20 kHz (mΩ) | 120 Hz 20 kHz (mΩ) | |
| 560 | 301561T160HT2 | 189.0 | 71.8 | 2.90 | 4.44 | .895 x 3.65 |
| 560 | 301561T160JS2 | 184.0 | 73.5 | 2.94 | 4.39 | 1.02 x 3.15 |
| 680 | 301681T160JT2 | 154.0 | 61.6 | 3.45 | 5.15 | 1.02 x 3.65 |
| 200 Vdc (250 Vdc Surge) | | | | | | |
| 56 | 301560T200GE2 | 2285.0 | 1051.0 | 0.43 | 0.59 | .77 x 1.15 |
| 82 | 301820T200HE2 | 1423.0 | 655.0 | 0.59 | 0.83 | .895 x 1.15 |
| 100 | 301101T200GJ2 | 1144.0 | 526.0 | 0.67 | 0.93 | .77 x 1.65 |
| 120 | 301121T200JE2 | 1012.0 | 465.0 | 0.74 | 1.02 | 1.02 x 1.15 |
| 150 | 301151T200GL2 | 763.0 | 351.0 | 1.02 | 1.42 | .77 x 2.15 |
| 180 | 301181T200HJ2 | 713.0 | 328.0 | 0.99 | 1.38 | .895 x 1.65 |
| 220 | 301221T200GP2 | 574.0 | 264.0 | 1.31 | 1.82 | .77 x 2.65 |
| 220 | 301221T200JJ2 | 507.0 | 233.0 | 1.28 | 1.78 | 1.02 x 1.65 |
| 270 | 301271T200GS2 | 460.0 | 212.0 | 1.60 | 2.22 | .77 x 3.15 |
| 270 | 301271T200HL2 | 476.0 | 219.0 | 1.41 | 1.96 | .895 x 2.15 |
| 330 | 301331T200GT2 | 384.0 | 177.0 | 1.87 | 2.59 | .77 x 3.65 |
| 330 | 301331T200HP2 | 358.0 | 165.0 | 1.81 | 2.51 | .895 x 2.65 |
| 390 | 301391T200HS2 | 288.0 | 132.0 | 2.20 | 3.06 | .895 x 3.15 |
| 390 | 301391T200JL2 | 339.0 | 156.0 | 1.79 | 2.49 | 1.02 x 2.15 |
| 470 | 301471T200HT2 | 240.0 | 111.0 | 2.57 | 3.57 | .895 x 3.65 |
| 470 | 301471T200JP2 | 255.0 | 117.0 | 2.30 | 3.19 | 1.02 x 2.65 |
| 560 | 301561T200JS2 | 205.0 | 94.4 | 2.78 | 3.87 | 1.02 x 3.15 |
| 680 | 301681T200JT2 | 172.0 | 79.1 | 3.27 | 4.54 | 1.02 x 3.65 |
| 250 Vdc (300 Vdc Surge) | | | | | | |
| 39 | 301390T250GE2 | 2708.0 | 1137.0 | 0.39 | 0.57 | .77 x 1.15 |
| 68 | 301680T250HE2 | 1684.0 | 707.0 | 0.55 | 0.79 | .895 x 1.15 |
| 82 | 301820T250GJ2 | 1355.0 | 569.0 | 0.61 | 0.89 | .77 x 1.65 |
| 100 | 301101T250JE2 | 1194.0 | 502.0 | 0.68 | 0.99 | 1.02 x 1.15 |
| 120 | 301121T250GL2 | 905.0 | 380.0 | 0.94 | 1.37 | .77 x 2.15 |
| 120 | 301121T250HJ2 | 843.0 | 354.0 | 0.91 | 1.33 | .895 x 1.65 |
| 150 | 301151T250GP2 | 679.0 | 285.0 | 1.21 | 1.75 | .77 x 2.65 |
| 180 | 301181T250JJ2 | 598.0 | 251.0 | 1.18 | 1.71 | 1.02 x 1.65 |
| 220 | 301221T250GS2 | 544.0 | 229.0 | 1.47 | 2.14 | .77 x 3.15 |
| 220 | 301221T250HL2 | 563.0 | 237.0 | 1.30 | 1.88 | .895 x 2.15 |
| 270 | 301271T250GT2 | 455.0 | 191.0 | 1.72 | 2.50 | .77 x 3.65 |
| 270 | 301271T250HP2 | 423.0 | 178.0 | 1.66 | 2.42 | .895 x 2.65 |
| 270 | 301271T250JL2 | 400.0 | 168.0 | 1.65 | 2.40 | 1.02 x 2.15 |
| 330 | 301331T250HS2 | 340.0 | 143.0 | 2.02 | 2.94 | .895 x 3.15 |
| 390 | 301391T250HT2 | 284.0 | 119.0 | 2.37 | 3.44 | .895 x 3.65 |
| 390 | 301391T250JP2 | 301.0 | 126.0 | 2.12 | 3.08 | 1.02 x 2.65 |
| 470 | 301471T250JS2 | 242.0 | 102.0 | 2.56 | 3.73 | 1.02 x 3.15 |
| 560 | 301561T250JT2 | 202.0 | 85.0 | 3.01 | 4.38 | 1.02 x 3.65 |

Type 300/301 –55 °C to 105 °C Long-Life, Switching Power Grade Radial

High Capacitance and Ultra-Low ESR

| Cap. (µF) | Catalog Part Number | ESR MAX @ 25°C 120 Hz 20 kHz (mΩ) | | Ripple MAX @ 85°C 120 Hz 20 kHz (mΩ) | | Nom Size Insulated D x L (in) | Cap. (µF) | Catalog Part Number | ESR MAX @ 25°C 120 Hz 20 kHz (mΩ) | | Ripple MAX @ 85°C 120 Hz 20 kHz (mΩ) | | Nom Size Insulated D x L (in) |
|------------------------------|---------------------|--------------------------------------|-------|-----------------------------------------|------|-------------------------------|------------------------------|---------------------|--------------------------------------|-------|-----------------------------------------|------|-------------------------------|
| 6.3 Vdc (9 Vdc Surge) | | | | | | | 680 | NR301681U020FF2 | 170.0 | 60.0 | 1.72 | 2.90 | .65 x 1.32 |
| 680 | NR301681U6R3EM2 | 231.0 | 150.0 | 1.16 | 1.44 | .51 x 1.10 | 1000 | NR301R102M020EN2 | 114.0 | 48.0 | 1.10 | 1.69 | .51 x 1.38 |
| 1000 | NR301102U6R3FK2 | 160.0 | 90.0 | 1.54 | 2.05 | .65 x 1.04 | 1500 | NR301R152M020ER2 | 85.0 | 33.0 | 2.23 | 3.58 | .51 x 1.73 |
| 1200 | NR301122U6R3ER2 | 134.0 | 70.0 | 1.78 | 2.46 | .51 x 1.73 | 1500 | NR301152U020LV2 | 90.0 | 50.0 | 2.42 | 3.25 | .73 x 1.63 |
| 1500 | NR301R152M6R3EG2 | 201.0 | 71.0 | 1.09 | 1.84 | .51 x .85 | 2200 | NR301R222M020FQ2 | 77.0 | 32.0 | 2.55 | 3.96 | .65 x 1.48 |
| 1500 | NR301152U6R3FN2 | 105.0 | 50.0 | 2.00 | 2.90 | .65 x 1.32 | 3300 | NR301R332M020LV2 | 62.0 | 26.0 | 3.19 | 4.92 | .73 x 1.63 |
| 2200 | NR301R222M6R3EM2 | 110.0 | 60.0 | 1.20 | 1.63 | .51 x 1.10 | 25 Vdc (35 Vdc Surge) | | | | | | |
| 3300 | NR301R332M6R3EN2 | 93.0 | 57.0 | 1.78 | 2.28 | .51 x 1.38 | 330 | NR301331U025EN2 | 290.0 | 120.0 | 1.13 | 1.75 | .51 x 1.38 |
| 3300 | NR301332U6R3LV2 | 76.0 | 45.0 | 2.61 | 3.39 | .73 x 1.63 | 390 | NR301R391M025EG2 | 267.0 | 92.0 | 0.89 | 1.52 | .51 x .85 |
| 3900 | NR301R392M6R3FK2 | 111.0 | 41.0 | 1.84 | 3.03 | .65 x 1.04 | 470 | NR301471U025ER2 | 220.0 | 80.0 | 1.42 | 2.35 | .51 x 1.73 |
| 4700 | NR301R472M6R3ER2 | 68.0 | 31.0 | 2.52 | 3.73 | .51 x 1.73 | 560 | NR301R561M025EK2 | 193.0 | 75.0 | 1.12 | 1.79 | .51 x 1.04 |
| 5600 | NR301R562M6R3FF2 | 78.0 | 37.0 | 2.43 | 3.53 | .65 x 1.32 | 680 | NR301R681M025EM2 | 160.0 | 67.0 | 1.40 | 2.17 | .51 x 1.10 |
| 5600 | NR301R682M6R3FQ2 | 71.0 | 34.0 | 2.53 | 3.65 | .65 x 1.48 | 680 | NR301681U025FQ2 | 190.0 | 75.0 | 1.53 | 2.44 | .65 x 1.48 |
| 5600 | NR301R822M6R3FV2 | 59.0 | 31.0 | 3.03 | 4.18 | .65 x 1.65 | 1000 | NR301R102M025EN2 | 152.0 | 56.0 | 1.62 | 2.67 | .51 x 1.38 |
| 6800 | NR301R822M6R3LQ2 | 67.0 | 29.0 | 2.97 | 4.51 | .73 x 1.48 | 1200 | NR301R122M025ER2 | 90.0 | 34.0 | 2.20 | 3.58 | .51 x 1.73 |
| 8200 | NR301R103M6R3LV2 | 54.0 | 24.0 | 3.47 | 5.21 | .73 x 1.63 | 1200 | NR301R122M025FK2 | 132.0 | 45.0 | 1.71 | 2.93 | .65 x 1.04 |
| 10 Vdc (15 Vdc Surge) | | | | | | | 1200 | NR301122U025LV2 | 100.0 | 50.0 | 2.26 | 3.20 | .73 x 1.63 |
| 1000 | NR301R102M010EG2 | 216.0 | 77.0 | 1.07 | 1.80 | .51 x .85 | 1500 | NR301R152M025FF2 | 95.0 | 39.0 | 2.20 | 3.44 | .65 x 1.32 |
| 1500 | NR301R152M010EK2 | 200.0 | 64.0 | 1.07 | 1.90 | .51 x 1.04 | 1800 | NR301R182M025FQ2 | 75.0 | 32.0 | 2.59 | 3.97 | .65 x 1.48 |
| 1800 | NR301R182M010EM2 | 122.0 | 62.0 | 1.58 | 2.21 | .51 x 1.10 | 2200 | NR301R222M025FV2 | 73.0 | 31.0 | 2.69 | 4.13 | .65 x 1.65 |
| 2700 | NR301R272M010EN2 | 111.0 | 59.0 | 1.66 | 2.28 | .51 x 1.38 | 2200 | NR301R222M025LQ2 | 70.0 | 30.0 | 2.84 | 4.34 | .73 x 1.48 |
| 2700 | NR301R272M010FK2 | 116.0 | 42.0 | 2.04 | 3.39 | .65 x 1.04 | 2700 | NR301R272M025LV2 | 62.0 | 26.0 | 3.22 | 4.97 | .73 x 1.63 |
| 3300 | NR301R332M010ER2 | 75.0 | 32.0 | 2.41 | 3.69 | .51 x 1.73 | 40 Vdc (60 Vdc Surge) | | | | | | |
| 4700 | NR301R472M010FF2 | 87.0 | 38.0 | 2.29 | 3.47 | .65 x 1.32 | 220 | NR301221U040FK2 | 480.0 | 140.0 | 0.89 | 1.65 | .65 x 1.04 |
| 5600 | NR301R562M010FQ2 | 78.0 | 33.0 | 2.35 | 3.62 | .65 x 1.48 | 330 | NR301R331M040EM2 | 202.0 | 68.0 | 1.19 | 2.05 | .51 x 1.10 |
| 6800 | NR301R682M010LQ2 | 71.0 | 31.0 | 2.92 | 4.42 | .73 x 1.48 | 330 | NR301331U040FN2 | 330.0 | 120.0 | 1.35 | 2.24 | .65 x 1.32 |
| 8200 | NR301R882M010LV2 | 60.0 | 26.0 | 3.30 | 5.01 | .73 x 1.63 | 390 | NR301391U040ER2 | 270.0 | 150.0 | 1.42 | 1.90 | .51 x 1.73 |
| 16 Vdc (25 Vdc Surge) | | | | | | | 470 | NR301R471M040FK2 | 133.0 | 46.0 | 1.66 | 2.82 | .65 x 1.04 |
| 820 | NR301R821M016EG2 | 216.0 | 85.0 | 1.12 | 1.78 | .51 x .85 | 680 | NR301R681M040ER2 | 95.0 | 35.0 | 2.07 | 3.41 | .51 x 1.73 |
| 1200 | NR301R122M016EM2 | 130.0 | 66.0 | 1.60 | 2.24 | .51 x 1.10 | 820 | NR301821U040LV2 | 160.0 | 75.0 | 1.78 | 2.60 | .73 x 1.63 |
| 1800 | NR301R182M016EN2 | 122.0 | 55.0 | 1.85 | 2.76 | .51 x 1.38 | 1000 | NR301R102M040FQ2 | 80.0 | 33.0 | 2.49 | 3.87 | .65 x 1.48 |
| 2200 | NR301R222M016FK2 | 120.0 | 42.0 | 1.79 | 3.02 | .65 x 1.04 | 1500 | NR301R152M040LV2 | 63.0 | 27.0 | 3.16 | 4.82 | .73 x 1.63 |
| 2700 | NR301R272M016ER2 | 82.0 | 32.0 | 1.66 | 2.65 | .51 x 1.73 | 50 Vdc (75 Vdc Surge) | | | | | | |
| 3300 | NR301R332M016FF2 | 78.0 | 32.0 | 2.42 | 3.78 | .65 x 1.32 | 100 | NR301101U050EN2 | 810.0 | 260.0 | 0.65 | 1.14 | .51 x 1.38 |
| 3900 | NR301R392M016FQ2 | 75.0 | 32.0 | 2.59 | 3.97 | .65 x 1.48 | 120 | NR301R121M050EG2 | 391.0 | 139.0 | 0.79 | 1.33 | .51 x .85 |
| 4700 | NR301R472M016LQ2 | 74.0 | 32.0 | 2.85 | 4.34 | .73 x 1.48 | 150 | NR301151U050FK2 | 550.0 | 220.0 | 0.82 | 1.30 | .65 x 1.04 |
| 5600 | NR301R562M016LV2 | 62.0 | 26.0 | 3.22 | 4.98 | .73 x 1.63 | 180 | NR301R181M050EK2 | 261.0 | 90.0 | 0.95 | 1.61 | .51 x 1.04 |
| 20 Vdc (30 Vdc Surge) | | | | | | | 180 | NR301181U050ER2 | 500.0 | 180.0 | 0.93 | 1.55 | .51 x 1.73 |
| 330 | NR301331U020EM2 | 360.0 | 160.0 | 0.89 | 1.34 | .51 x 1.10 | 220 | NR301R221M050EM2 | 240.0 | 69.0 | 1.12 | 2.08 | .51 x 1.04 |
| 470 | NR301R471M020EG2 | 250.0 | 77.0 | 0.55 | 0.99 | .51 x .85 | 220 | NR301221U050FN2 | 420.0 | 150.0 | 1.09 | 1.83 | .65 x 1.32 |
| 470 | NR301471U020FK2 | 240.0 | 90.0 | 1.22 | 2.00 | .65 x 1.04 | 330 | NR301R331M050EN2 | 221.0 | 63.0 | 1.19 | 2.22 | .51 x 1.38 |
| 560 | NR301561U020ER2 | 220.0 | 80.0 | 1.41 | 2.34 | .51 x 1.73 | 390 | NR301R391M050FK2 | 150.0 | 48.0 | 1.60 | 2.82 | .65 x 1.04 |
| 680 | NR301R681M020EM2 | 140.0 | 67.0 | 1.46 | 2.11 | .51 x 1.10 | 470 | NR301R471M050ER2 | 111.0 | 36.0 | 1.97 | 3.46 | .51 x 1.73 |

Type 300/301 –55 °C to 105 °C Long-Life, Switching Power Grade Radial

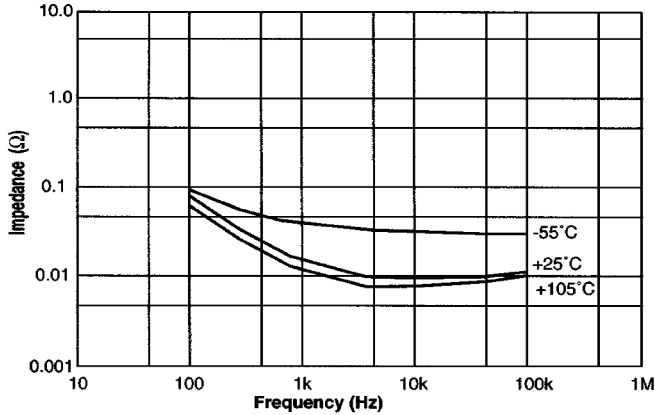
High Capacitance and Ultra-Low ESR

| Cap. (µF) | Catalog Part Number | ESR MAX @ 25°C 120 Hz 20 kHz (mΩ) | | Ripple MAX @ 85°C 120 Hz 20 kHz (mΩ) | | Nom Size Insulated D x L (in) | Cap. (µF) | Catalog Part Number | ESR MAX @ 25°C 120 Hz 20 kHz (mΩ) | | Ripple MAX @ 85°C 120 Hz 20 kHz (mΩ) | | Nom Size Insulated D x L (in) |
|--------------------------------|---------------------|--------------------------------------|--------|-----------------------------------------|------|-------------------------------|--------------------------------|---------------------|--------------------------------------|--------|-----------------------------------------|------|-------------------------------|
| 470 | NR301471U050LV2 | 250.0 | 90.0 | 1.44 | 2.40 | .73 x 1.63 | 160 Vdc (200 Vdc Surge) | | | | | | |
| 560 | NR301R561M050FF2 | 118.0 | 41.0 | 1.98 | 3.36 | .65 x 1.32 | 39 | NR301390U160EN2 | 6210.0 | 600.0 | 0.23 | 0.74 | .51 x 1.38 |
| 680 | NR301R681M050FQ2 | 102.0 | 40.0 | 2.31 | 3.69 | .65 x 1.48 | 47 | NR301470U160FK2 | 6000.0 | 620.0 | 0.23 | 0.70 | .65 x 1.04 |
| 820 | NR301R821M050FV2 | 95.0 | 38.0 | 2.40 | 3.79 | .65 x 1.63 | 56 | NR301560U160ER2 | 5110.0 | 500.0 | 0.28 | 0.89 | .51 x 1.73 |
| 820 | NR301R821M050LQ2 | 89.0 | 36.0 | 2.59 | 4.07 | .73 x 1.48 | 68 | NR301680U160FF2 | 3500.0 | 350.0 | 0.36 | 1.15 | .65 x 1.32 |
| 1000 | NR301R102M050LV2 | 77.0 | 28.0 | 2.90 | 4.81 | .73 x 1.63 | 82 | NR301820U160FQ2 | 2950.0 | 320.0 | 0.50 | 1.53 | .65 x 1.48 |
| 63 Vdc (90 Vdc Surge) | | | | | | | 100 | NR301101U160LQ2 | 2540.0 | 210.0 | 0.47 | 1.65 | .73 x 1.48 |
| 120 | NR301R121M063EG2 | 451.0 | 93.0 | 0.73 | 1.60 | .51 x .85 | 120 | NR301121U160LV2 | 2010.0 | 190.0 | 0.55 | 1.79 | .73 x 1.63 |
| 180 | NR301R181M063EK2 | 298.0 | 90.0 | 1.01 | 1.83 | .51 x 1.04 | 200 Vdc (250 Vdc Surge) | | | | | | |
| 270 | NR301R271M063EN2 | 160.0 | 55.0 | 1.44 | 2.46 | .51 x 1.38 | 10 | NR301100U200EG2 | 19900.0 | 1780.0 | 0.12 | 0.39 | .51 x .85 |
| 330 | NR301R331M063FK2 | 171.0 | 50.0 | 1.48 | 2.74 | .65 x 1.04 | 15 | NR301150U200EK2 | 15200.0 | 1270.0 | 0.14 | 0.49 | .51 x 1.04 |
| 390 | NR301R391M063ER2 | 130.0 | 38.0 | 1.83 | 3.38 | .51 x 1.73 | 18 | NR301180U200EM2 | 10600.0 | 960.0 | 0.19 | 0.63 | .51 x 1.10 |
| 470 | NR301R471M063FF2 | 142.0 | 43.0 | 1.80 | 3.27 | .65 x 1.32 | 22 | NR301220U200EN2 | 7010.0 | 580.0 | 0.22 | 0.75 | .51 x 1.38 |
| 560 | NR301R561M063FQ2 | 120.0 | 35.0 | 2.05 | 3.80 | .65 x 1.48 | 27 | NR301270U200FK2 | 6500.0 | 650.0 | 0.22 | 0.68 | .65 x 1.04 |
| 680 | NR301R681M063FV2 | 113.0 | 32.0 | 2.06 | 3.87 | .65 x 1.65 | 33 | NR301330U200ER2 | 5990.0 | 550.0 | 0.26 | 0.87 | .51 x 1.73 |
| 680 | NR301R681M063LQ2 | 103.0 | 29.0 | 2.21 | 4.17 | .73 x 1.48 | 39 | NR301390U200FF2 | 3910.0 | 340.0 | 0.34 | 1.15 | .65 x 1.32 |
| 820 | NR301R821M063LV2 | 90.0 | 29.0 | 2.69 | 4.74 | .73 x 1.63 | 47 | NR301470U200FQ2 | 3730.0 | 330.0 | 0.45 | 1.50 | .65 x 1.48 |
| 100 Vdc (140 Vdc Surge) | | | | | | | 56 | NR301560U200FV2 | 3250.0 | 290.0 | 0.47 | 1.58 | .65 x 1.65 |
| 47 | NR301470U100EG2 | 1770.0 | 345.0 | 0.38 | 0.74 | .51 x .85 | 68 | NR301680U200LQ2 | 2840.0 | 260.0 | 0.53 | 1.74 | .73 x 1.48 |
| 68 | NR301680U100EM2 | 1160.0 | 183.0 | 0.42 | 1.10 | .51 x 1.10 | 82 | NR301820U200LV2 | 2310.0 | 180.0 | 0.53 | 1.89 | .73 x 1.63 |
| 100 | NR301101U100EN2 | 756.0 | 149.0 | 0.52 | 1.37 | .51 x 1.38 | 250 Vdc (300 Vdc Surge) | | | | | | |
| 120 | NR301121U100FK2 | 686.0 | 139.0 | 0.55 | 1.48 | .65 x 1.04 | 8.2 | NR30182U250EG2 | 29900.0 | 3050.0 | 0.07 | 0.23 | .51 x .85 |
| 150 | NR301151U100ER2 | 519.0 | 104.0 | 0.61 | 1.83 | .51 x 1.73 | 12 | NR301120U250EK2 | 23300.0 | 2500.0 | 0.09 | 0.27 | .51 x 1.04 |
| 180 | NR301181U100FF2 | 450.0 | 93.0 | 0.64 | 2.00 | .65 x 1.32 | 15 | NR301150U250EM2 | 15000.0 | 1900.0 | 0.14 | 0.38 | .51 x 1.10 |
| 220 | NR301221U100FQ2 | 365.0 | 76.0 | 0.69 | 2.31 | .65 x 1.48 | 18 | NR301180U250EN2 | 12100.0 | 1500.0 | 0.17 | 0.47 | .51 x 1.38 |
| 270 | NR301271U100FV2 | 298.0 | 63.0 | 0.75 | 2.64 | .65 x 1.65 | 27 | NR301270U250FK2 | 10800.0 | 1610.0 | 0.20 | 0.53 | .65 x 1.04 |
| 330 | NR301331U100LQ2 | 249.0 | 55.0 | 0.81 | 2.94 | .73 x 1.48 | 27 | NR301270U250ER2 | 7820.0 | 1390.0 | 0.28 | 0.67 | .51 x 1.73 |
| 390 | NR301391U100LV2 | 210.0 | 47.0 | 0.87 | 3.35 | .73 x 1.63 | 33 | NR301330U250FF2 | 5500.0 | 720.0 | 0.29 | 0.80 | .65 x 1.32 |
| 160 Vdc (200 Vdc Surge) | | | | | | | 39 | NR301390U250FQ2 | 5260.0 | 700.0 | 0.32 | 0.89 | .65 x 1.48 |
| 15 | NR301150U160EG2 | 17500.0 | 1450.0 | 0.12 | 0.40 | .51 x .85 | 47 | NR301470U250FV2 | 4680.0 | 670.0 | 0.38 | 1.00 | .65 x 1.65 |
| 22 | NR301220U160EK2 | 12800.0 | 960.0 | 0.14 | 0.52 | .51 x 1.04 | 56 | NR301560U250LQ2 | 3750.0 | 550.0 | 0.42 | 1.10 | .73 x 1.48 |
| 27 | NR301270U160EM2 | 9700.0 | 720.0 | 0.18 | 0.66 | .51 x 1.10 | 68 | NR301680U250LV2 | 3110.0 | 360.0 | 0.44 | 1.29 | .73 x 1.63 |

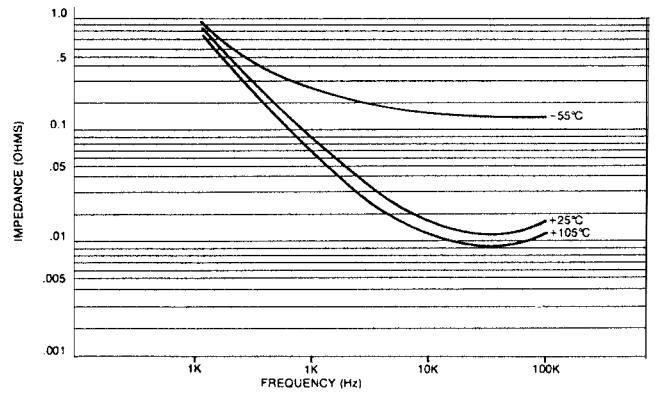
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Typical Performance Curves

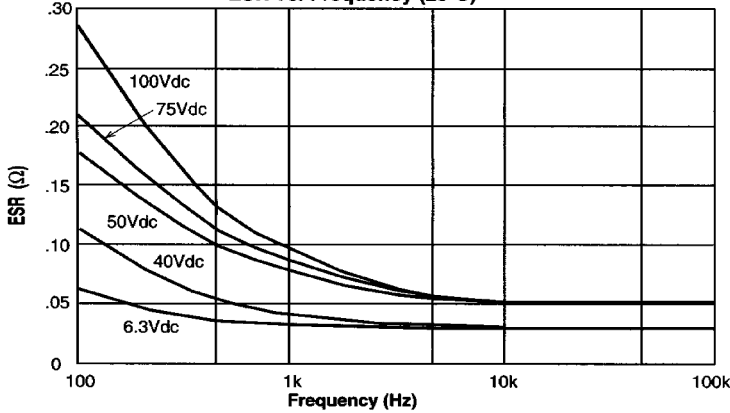
Type 301/301R Impedance vs Frequency
18,000 μ F, 6.3V, 1x3 $\frac{5}{8}$ "



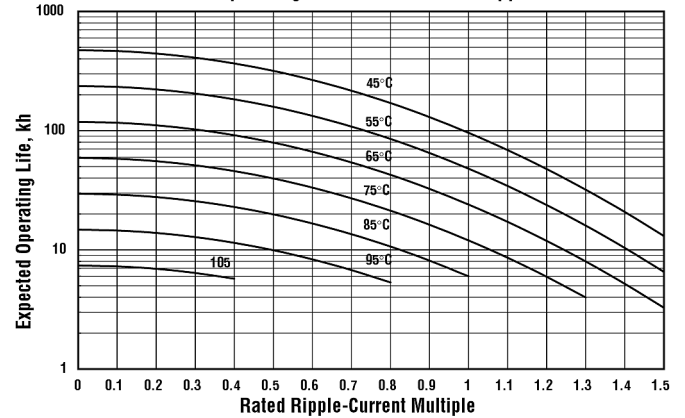
1500 μ F 75V, 1" x 3 $\frac{3}{8}$ "
Impedance-Frequency Characteristics



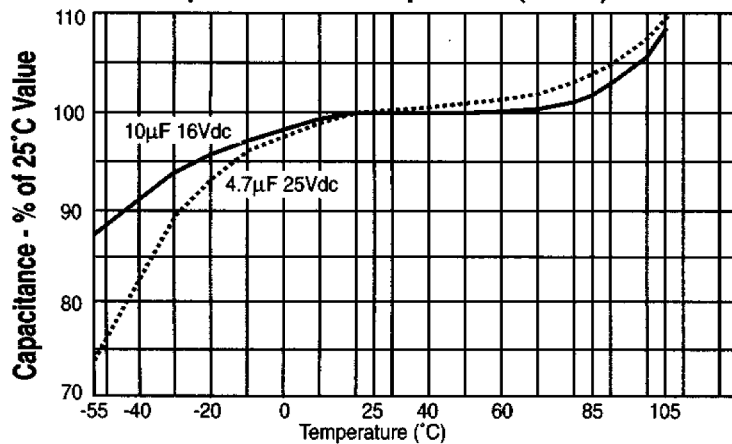
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