



Aluminum Capacitors +85 °C, Miniature, Axial Lead



FEATURES

- High CV per case size
- Material categorization:
for definitions of compliance please see
www.vishay.com/doc?99912



RoHS
COMPLIANT

| QUICK REFERENCE DATA | |
|---|---|
| DESCRIPTION | VALUE |
| Nominal case size Ø D x L in mm | 0.197" x 0.472" [5.0 x 12.0] to 0.709" x 1.614" [18.0 x 41.0] |
| Operating temperature | -40 °C to +85 °C (-25 °C to +85 °C for 315 WV _{DC} to 450 WV _{DC} units) |
| Rated capacitance range, C _R | 0.47 µF to 10 000 µF |
| Tolerance on C _R | ± 20 % |
| Rated voltage range, U _R | 6.3 WV _{DC} to 450 WV _{DC} |
| Termination | 2 axial leads |
| Life validation test at 85 °C | 2000 h: ΔCAP ≤ 20 % from initial measurement. ΔDF x 2 initial specified limit. ΔDCL ≤ initial specified limit. |
| Shelf life at 85 °C | 1000 h: ΔCAP ± 20 % from initial measurement. ΔDF 2 x initial specified limit. ΔDCL ≤ the initial specified limit. |
| DC leakage current | Rated voltage for 1 min for 6.3 WV _{DC} to 100 WV _{DC} units I < 0.03 CV or 4 µA (whichever is greater) Rated voltage for 2 min for 6.3 WV _{DC} to 100 WV _{DC} units I < 0.01 CV or 3 µA (whichever is greater) Rated voltage for 1 min for 160 WV _{DC} to 450 WV _{DC} units I < 0.1 CV + 40 µA and CV ≤ 1000 I < 0.04 CV + 100 µA and CV > 1000 |

| RIPPLE CURRENT MULTIPLIERS | | | | | | |
|-----------------------------------|-------------------|-------------|---------------|---------------|-------|----------|
| TEMPERATURE | | | | | | |
| AMBIENT TEMPERATURE | | | MULTIPLIERS | | | |
| ≤ +70 °C | | | 1.27 | | | |
| +85 °C | | | 1.0 | | | |
| FREQUENCY (Hz) / CAPACITANCE (µF) | | | | | | |
| WV _{DC} | CAP. (µF) | 50 TO 60 | 100 TO 120 | 300 TO 400 | 1 kHz | ≥ 10 kHz |
| 6.3 to 100 | 0 to 47 | 0.75 | 1 | 1.35 | 1.57 | 2.00 |
| | 100 to 470 | 0.80 | 1 | 1.23 | 1.34 | 1.50 |
| 160 to 450 | 1000 to 10 000 | 0.85 | 1 | 1.10 | 1.13 | 1.15 |
| | 1 to 100 | 0.80 | 1 | 1.25 | 1.40 | 1.60 |

| LOW TEMPERATURE PERFORMANCE | | |
|--|-----------------------|-----------------------|
| MAXIMUM IMPEDANCE RATIO Z ^(T) / Z ^(+20 °C) MAXIMUM AT 120 Hz | | |
| RATED VOLTAGE (WV _{DC}) | Z - 25 °C / Z + 20 °C | Z - 40 °C / Z + 20 °C |
| 6.3 | 4.0 | 10.0 |
| 10.0 | 3.0 | 8.0 |
| 16.0 | 2.0 | 6.0 |
| 25.0 | 2.0 | 4.0 |
| 35.0 to 100.0 | 2.0 | 3.0 |
| 160.0 to 250.0 | 4.0 | 12.0 |
| 315.0 to 350.0 | 6.0 | - |
| 400.0 to 450.0 | 15.0 | - |

| DIMENSIONS in inches [millimeters] | | | | | | | |
|------------------------------------|-----------------------------|---------------|-----------------------|-----------|-----------------------------|---------------|-----------------------|
| CASE CODE | NOMINAL CASE SIZE D x L | LEAD DIAMETER | TYPICAL WEIGHT (g) | CASE CODE | NOMINAL CASE SIZE D x L | LEAD DIAMETER | TYPICAL WEIGHT (g) |
| JL | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.56 | NR | 0.394 x 1.023 [10.0 x 26.0] | 0.024 [0.6] | 3.10 |
| LL | 0.248 x 0.472 [6.3 x 12.0] | 0.024 [0.6] | 0.90 | PR | 0.512 x 1.023 [13.0 x 26.0] | 0.024 [0.6] | 4.63 |
| LM | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 1.07 | PS | 0.512 x 1.240 [13.0 x 31.5] | 0.024 [0.6] | 5.47 |
| MM | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 1.45 | QS | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 8.26 |
| MN | 0.315 x 0.787 [8.0 x 20.0] | 0.024 [0.6] | 1.70 | QT | 0.630 x 1.633 [16.0 x 41.5] | 0.031 [0.8] | 10.42 |
| NP | 0.394 x 0.827 [10.0 x 21.0] | 0.024 [0.6] | 2.32 | RT | 0.709 x 1.614 [18.0 x 41.0] | 0.031 [0.8] | 12.42 |

DIMENSIONS in inches [millimeters]



| DIMENSIONS in inches [millimeters] AND PACKAGING QUANTITIES | | | | |
|---|-------------|--------------------------------|-------------------------------------|-------------------|
| CASE CODE | TAPING CODE | SPECIFICATIONS | | |
| | | TAPE WIDTH $W \pm 0.059$ [1.5] | COMPONENT PITCH $P \pm 0.020$ [0.5] | QUANTITY PER REEL |
| JL | B | 2.063 [52.4] | 0.394 [10.0] | 1600 |
| LL | B | 2.063 [52.4] | 0.394 [10.0] | 1300 |
| LM | B | 2.063 [52.4] | 0.394 [10.0] | 1300 |
| MM | B | 2.063 [52.4] | 0.394 [10.0] | 1000 |
| MN | B | 2.500 [63.5] | 0.394 [10.0] | 1000 |
| NP | B | 2.500 [63.5] | 0.591 [15.0] | 500 |
| NP | C | 2.874 [73.0] | 0.591 [15.0] | 500 |
| NR | B | 2.500 [63.5] | 0.591 [15.0] | 500 |
| NR | C | 2.874 [73.0] | 0.591 [15.0] | 500 |
| PR | B | 2.500 [63.5] | 0.591 [15.0] | 350 |
| PR | C | 2.874 [73.0] | 0.591 [15.0] | 350 |
| PS | B | 2.874 [73.0] | 0.591 [15.0] | 350 |

ORDERING EXAMPLE

Electrolytic capacitor 516D series: 516D 107 M 6R3 JL 6 A E3

| DESCRIPTION | |
|-------------|---------------------------------------|
| CODE | EXPLANATION |
| 516D | Product type |
| 107 | Capacitance value (100 μ F) |
| M | Tolerance (M = ± 20 %) |
| 6R3 | Voltage rating at 85 °C (6R3 = 6.3 V) |
| JL | Can size (see Dimensions table) |
| 6 | Packaging (bulk) |
| A | Lead style (uncut) |
| E3 | RoHS compliant indicator |

PACKING AND LEAD STYLES

- 6A Bulk, uncut leads.
- 7B Tape and reel. For case codes JL, LL, LM, MM, MN, NP, NR, PR and PS only.
- 7C Tape and reel with 2.874" [73.0] mm tape width. For case codes NP, NR and PR only.

* Suffix E3 denotes lead (Pb)-free / RoHS-compliant products



| ELECTRICAL DATA AND ORDERING INFORMATION | | | | | |
|---|--------------------|------------------------------------|--------------------------|---|--|
| CAPACITANCE (μF) | PART NUMBER | NOMINAL CASE SIZE D x L | LEAD DIAMETER | MAX. DF AT +20 °C 120 Hz | MAX. RIPPLE AT +85 °C / 120 Hz (mA_{RMS}) |
| 6.3 WV_{DC} AT +85 °C, SURGE = 8 V | | | | | |
| 100 | 516D107M6R3JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.24 | 110 |
| 220 | 516D227M6R3LM6AE3 | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 0.24 | 200 |
| 330 | 516D337M6R3LM6AE3 | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 0.24 | 250 |
| 470 | 516D477M6R3MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.24 | 330 |
| 1000 | 516D108M6R3NP6AE3 | 0.394 x 0.827 [10.0 x 21.0] | 0.024 [0.6] | 0.24 | 600 |
| 2200 | 516D228M6R3PR6AE3 | 0.512 x 1.024 [13.0 x 26.0] | 0.024 [0.6] | 0.24 | 1020 |
| 3300 | 516D338M6R3PR6AE3 | 0.512 x 1.024 [13.0 x 26.0] | 0.024 [0.6] | 0.24 | 1200 |
| 4700 | 516D478M6R3QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.024 [0.6] | 0.24 | 1500 |
| 6800 | 516D688M6R3QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 0.24 | 1840 |
| 10 000 | 516D109M6R3QT6AE3 | 0.630 x 1.633 [16.0 x 41.5] | 0.031 [0.8] | 0.24 | 2260 |
| 10 WV_{DC} AT +85 °C, SURGE = 13 V | | | | | |
| 33 | 516D336M010JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.2 | 65 |
| 47 | 516D476M010JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.2 | 80 |
| 100 | 516D107M010LL6AE3 | 0.248 x 0.472 [6.3 x 12.0] | 0.024 [0.6] | 0.2 | 130 |
| 220 | 516D227M010LM6AE3 | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 0.2 | 210 |
| 330 | 516D337M010MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.2 | 300 |
| 470 | 516D477M010MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.2 | 350 |
| 1000 | 516D108M010NP6AE3 | 0.394 x 0.827 [10.0 x 21.0] | 0.024 [0.6] | 0.2 | 640 |
| 2200 | 516D228M010PR6AE3 | 0.512 x 1.024 [13.0 x 26.0] | 0.024 [0.6] | 0.2 | 1090 |
| 3300 | 516D338M010PS6AE3 | 0.512 x 1.240 [13.0 x 31.5] | 0.024 [0.6] | 0.2 | 1390 |
| 4700 | 516D478M010QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 0.2 | 1730 |
| 6800 | 516D688M010QT6AE3 | 0.630 x 1.633 [16.0 x 41.5] | 0.031 [0.8] | 0.2 | 1930 |
| 10 000 | 516D109M010RT6AE3 | 0.709 x 1.614 [18.0 x 41.0] | 0.031 [0.8] | 0.2 | 2350 |
| 16 WV_{DC} AT +85 °C, SURGE = 20 V | | | | | |
| 22 | 516D226M016JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.16 | 60 |
| 33 | 516D336M016JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.16 | 70 |
| 47 | 516D476M016JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.16 | 85 |
| 100 | 516D107M016LM6AE3 | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 0.16 | 160 |
| 220 | 516D227M016MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.16 | 260 |
| 330 | 516D337M016MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.16 | 320 |
| 470 | 516D477M016MN6AE3 | 0.315 x 0.787 [8.0 x 20.0] | 0.024 [0.6] | 0.16 | 430 |
| 1000 | 516D108M016NR6AE3 | 0.394 x 1.024 [10.0 x 26.0] | 0.024 [0.6] | 0.16 | 770 |
| 2200 | 516D228M016PS6AE3 | 0.512 x 1.240 [13.0 x 31.5] | 0.024 [0.6] | 0.16 | 1180 |
| 3300 | 516D338M016QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 0.16 | 1620 |
| 4700 | 516D478M016QT6AE3 | 0.630 x 1.633 [16.0 x 41.5] | 0.031 [0.8] | 0.16 | 1840 |
| 6800 | 516D688M016RT6AE3 | 0.709 x 1.614 [18.0 x 41.0] | 0.031 [0.8] | 0.16 | 2310 |
| 25 WV_{DC} AT +85 °C, SURGE = 32 V | | | | | |
| 10 | 516D106M025JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.14 | 40 |
| 22 | 516D226M025JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.14 | 65 |
| 33 | 516D336M025JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.14 | 80 |
| 47 | 516D476M025LL6AE3 | 0.248 x 0.472 [6.3 x 12.0] | 0.024 [0.6] | 0.14 | 100 |
| 100 | 516D107M025LM6AE3 | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 0.14 | 170 |
| 220 | 516D227M025MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.14 | 280 |
| 330 | 516D337M025MN6AE3 | 0.315 x 0.787 [8.0 x 20.0] | 0.024 [0.6] | 0.14 | 380 |
| 470 | 516D477M025NR6AE3 | 0.394 x 1.024 [10.0 x 26.0] | 0.024 [0.6] | 0.14 | 510 |
| 1000 | 516D108M025PR6AE3 | 0.512 x 1.024 [13.0 x 26.0] | 0.024 [0.6] | 0.14 | 900 |



| ELECTRICAL DATA AND ORDERING INFORMATION | | | | | |
|---|--------------------|------------------------------------|--------------------------|---|---|
| CAPACITANCE (μF) | PART NUMBER | NOMINAL CASE SIZE D x L | LEAD DIAMETER | MAX. DF AT +20 °C 120 Hz | MAX. RIPPLE AT +85 °C / 120 Hz (mArms) |
| 25 WV_{DC} AT +85 °C, SURGE = 32 V | | | | | |
| 2200 | 516D228M025QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 0.14 | 1480 |
| 3300 | 516D338M025QT6AE3 | 0.630 x 1.633 [16.0 x 41.5] | 0.031 [0.8] | 0.14 | 1710 |
| 4700 | 516D478M025RT6AE3 | 0.709 x 1.614 [18.0 x 41.0] | 0.031 [0.8] | 0.14 | 2170 |
| 35 WV_{DC} AT +85 °C, SURGE = 44 V | | | | | |
| 10 | 516D106M035JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.12 | 45 |
| 22 | 516D226M035JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.12 | 70 |
| 33 | 516D336M035LL6AE3 | 0.248 x 0.472 [6.3 x 12.0] | 0.024 [0.6] | 0.12 | 90 |
| 47 | 516D476M035LM6AE3 | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 0.12 | 120 |
| 100 | 516D107M035MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.12 | 210 |
| 220 | 516D227M035MN6AE3 | 0.315 x 0.787 [8.0 x 20.0] | 0.024 [0.6] | 0.12 | 340 |
| 330 | 516D337M035NP6AE3 | 0.394 x 0.827 [10.0 x 21.0] | 0.024 [0.6] | 0.12 | 460 |
| 470 | 516D477M035NR6AE3 | 0.394 x 1.024 [10.0 x 26.0] | 0.024 [0.6] | 0.12 | 610 |
| 1000 | 516D108M035PS6AE3 | 0.512 x 1.240 [13.0 x 31.5] | 0.024 [0.6] | 0.12 | 1060 |
| 2200 | 516D228M035QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 0.12 | 1580 |
| 3300 | 516D338M035QT6AE3 | 0.630 x 1.633 [16.0 x 41.5] | 0.031 [0.8] | 0.12 | 2050 |
| 50 WV_{DC} AT +85 °C, SURGE = 63 V | | | | | |
| 0.47 | 516D474M050JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.1 | 5 |
| 1.0 | 516D105M050JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.1 | 10 |
| 2.2 | 516D225M050JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.1 | 23 |
| 3.3 | 516D335M050JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.1 | 28 |
| 4.7 | 516D475M050JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.1 | 34 |
| 10 | 516D106M050JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.1 | 50 |
| 22 | 516D226M050LL6AE3 | 0.248 x 0.472 [6.3 x 12.0] | 0.024 [0.6] | 0.1 | 85 |
| 33 | 516D336M050LM6AE3 | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 0.1 | 110 |
| 47 | 516D476M050LM6AE3 | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 0.1 | 130 |
| 100 | 516D107M050MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.1 | 220 |
| 220 | 516D227M050NP6AE3 | 0.394 x 0.827 [10.0 x 21.0] | 0.024 [0.6] | 0.1 | 410 |
| 330 | 516D337M050NR6AE3 | 0.394 x 1.024 [10.0 x 26.0] | 0.024 [0.6] | 0.1 | 560 |
| 470 | 516D477M050PR6AE3 | 0.512 x 1.024 [13.0 x 26.0] | 0.024 [0.8] | 0.1 | 730 |
| 1000 | 516D108M050QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 0.1 | 1260 |
| 2200 | 516D228M050RT6AE3 | 0.709 x 1.614 [18.0 x 41.0] | 0.031 [0.8] | 0.1 | 1920 |
| 63 WV_{DC} AT +85 °C, SURGE = 79 V | | | | | |
| 3.3 | 516D335M063JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.08 | 31 |
| 4.7 | 516D475M063JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.08 | 37 |
| 10 | 516D106M063JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.08 | 55 |
| 22 | 516D226M063LL6AE3 | 0.248 x 0.472 [6.3 x 12.0] | 0.024 [0.6] | 0.08 | 90 |
| 33 | 516D336M063LM6AE3 | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 0.08 | 120 |
| 47 | 516D476M063MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.08 | 160 |
| 100 | 516D107M063MN6AE3 | 0.315 x 0.787 [8.0 x 20.0] | 0.024 [0.6] | 0.08 | 260 |
| 220 | 516D227M063NR6AE3 | 0.394 x 1.024 [10.0 x 26.0] | 0.024 [0.6] | 0.08 | 480 |
| 330 | 516D337M063PR6AE3 | 0.512 x 1.024 [13.0 x 26.0] | 0.024 [0.6] | 0.08 | 650 |
| 470 | 516D477M063PS6AE3 | 0.512 x 1.240 [13.0 x 31.5] | 0.024 [0.6] | 0.08 | 840 |
| 1000 | 516D108M063QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 0.08 | 1330 |



| ELECTRICAL DATA AND ORDERING INFORMATION | | | | | |
|---|--------------------|------------------------------------|--------------------------|---|---|
| CAPACITANCE (μF) | PART NUMBER | NOMINAL CASE SIZE D x L | LEAD DIAMETER | MAX. DF AT +20 °C 120 Hz | MAX. RIPPLE AT +85 °C / 120 Hz (mArms) |
| 100 WV_{DC} AT +85 °C, SURGE = 125 V | | | | | |
| 0.47 | 516D474M100JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.08 | 10 |
| 1.0 | 516D105M100JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.08 | 18 |
| 2.2 | 516D225M100JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.08 | 28 |
| 3.3 | 516D335M100JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.08 | 34 |
| 4.7 | 516D475M100JL6AE3 | 0.197 x 0.472 [5.0 x 12.0] | 0.024 [0.6] | 0.08 | 40 |
| 10 | 516D106M100LL6AE3 | 0.248 x 0.472 [6.3 x 12.0] | 0.024 [0.6] | 0.08 | 60 |
| 22 | 516D226M100MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.08 | 120 |
| 33 | 516D336M100MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.08 | 150 |
| 47 | 516D476M100MN6AE3 | 0.315 x 0.787 [8.0 x 20.0] | 0.024 [0.6] | 0.08 | 190 |
| 100 | 516D107M100NR6AE3 | 0.394 x 1.024 [10.0 x 26.0] | 0.024 [0.6] | 0.08 | 340 |
| 220 | 516D227M100PR6AE3 | 0.512 x 1.024 [13.0 x 26.0] | 0.024 [0.6] | 0.08 | 560 |
| 330 | 516D337M100PS6AE3 | 0.512 x 1.240 [13.0 x 31.5] | 0.024 [0.6] | 0.08 | 750 |
| 470 | 516D477M100QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 0.08 | 970 |
| 160 WV_{DC} AT +85 °C, SURGE = 200 V | | | | | |
| 1.0 | 516D105M160LL6AE3 | 0.248 x 0.472 [6.3 x 12.0] | 0.024 [0.6] | 0.2 | 13 |
| 2.2 | 516D225M160LM6AE3 | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 0.2 | 23 |
| 3.3 | 516D335M160MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.2 | 33 |
| 4.7 | 516D475M160MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.2 | 39 |
| 10 | 516D106M160MN6AE3 | 0.315 x 0.787 [8.0 x 20.0] | 0.024 [0.6] | 0.2 | 60 |
| 22 | 516D226M160NR6AE3 | 0.394 x 1.024 [10.0 x 26.0] | 0.024 [0.6] | 0.2 | 120 |
| 33 | 516D336M160PR6AE3 | 0.512 x 1.024 [13.0 x 26.0] | 0.024 [0.6] | 0.2 | 170 |
| 47 | 516D476M160PS6AE3 | 0.512 x 1.240 [13.0 x 31.5] | 0.024 [0.6] | 0.2 | 230 |
| 100 | 516D107M160QT6AE3 | 0.630 x 1.633 [16.0 x 41.5] | 0.031 [0.8] | 0.2 | 430 |
| 200 WV_{DC} AT +85 °C, SURGE = 250 V | | | | | |
| 1.0 | 516D105M200LL6AE3 | 0.248 x 0.472 [6.3 x 12.0] | 0.024 [0.6] | 0.2 | 13 |
| 2.2 | 516D225M200LM6AE3 | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 0.2 | 23 |
| 3.3 | 516D335M200MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.2 | 33 |
| 4.7 | 516D475M200MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.2 | 39 |
| 10 | 516D106M200NP6AE3 | 0.394 x 0.827 [10.0 x 21.0] | 0.024 [0.6] | 0.2 | 70 |
| 22 | 516D226M200PR6AE3 | 0.512 x 1.024 [13.0 x 26.0] | 0.024 [0.6] | 0.2 | 140 |
| 33 | 516D336M200PR6AE3 | 0.512 x 1.024 [13.0 x 26.0] | 0.024 [0.6] | 0.2 | 170 |
| 47 | 516D476M200PS6AE3 | 0.512 x 1.240 [13.0 x 31.5] | 0.024 [0.6] | 0.2 | 230 |
| 100 | 516D107M200QT6AE3 | 0.630 x 1.633 [16.0 x 41.5] | 0.031 [0.8] | 0.2 | 430 |
| 250 WV_{DC} AT +85 °C, SURGE = 300 V | | | | | |
| 1.0 | 516D105M250LM6AE3 | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 0.2 | 14 |
| 2.2 | 516D225M250MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.2 | 27 |
| 3.3 | 516D335M250MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.2 | 33 |
| 4.7 | 516D475M250MN6AE3 | 0.315 x 0.787 [8.0 x 20.0] | 0.024 [0.6] | 0.2 | 45 |
| 10 | 516D106M250NP6AE3 | 0.394 x 0.827 [10.0 x 21.0] | 0.024 [0.6] | 0.2 | 70 |
| 22 | 516D226M250PR6AE3 | 0.512 x 1.024 [13.0 x 26.0] | 0.024 [0.6] | 0.2 | 140 |
| 33 | 516D336M250PS6AE3 | 0.512 x 1.240 [13.0 x 31.5] | 0.024 [0.6] | 0.2 | 190 |
| 47 | 516D476M250QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 0.2 | 260 |
| 100 | 516D107M250QT6AE3 | 0.630 x 1.633 [16.0 x 41.5] | 0.031 [0.8] | 0.2 | 430 |



| ELECTRICAL DATA AND ORDERING INFORMATION | | | | | |
|---|--------------------|------------------------------------|--------------------------|---|--|
| CAPACITANCE (μF) | PART NUMBER | NOMINAL CASE SIZE D x L | LEAD DIAMETER | MAX. DF AT +20 °C 120 Hz | MAX. RIPPLE AT +85 °C / 120 Hz (mA_{RMS}) |
| 315 WV_{DC} AT +85 °C, SURGE = 365 V | | | | | |
| 1.0 | 516D105M315LM6AE3 | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 0.2 | 14 |
| 2.2 | 516D225M315MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.2 | 27 |
| 3.3 | 516D335M315MN6AE3 | 0.315 x .0787 [8.0 x 20.0] | 0.024 [0.6] | 0.2 | 36 |
| 4.7 | 516D475M315MN6AE3 | 0.315 x 0.787 [8.0 x 20.0] | 0.024 [0.6] | 0.2 | 45 |
| 10 | 516D106M315NR6AE3 | 0.394 x 1.024 [10.0 x 26.0] | 0.024 [0.6] | 0.2 | 80 |
| 22 | 516D226M315PS6AE3 | 0.512 x 1.240 [13.0 x 31.5] | 0.024 [0.6] | 0.2 | 150 |
| 33 | 516D336M315QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 0.2 | 210 |
| 47 | 516D476M315QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 0.2 | 260 |
| 350 WV_{DC} AT +85 °C, SURGE = 400 V | | | | | |
| 1.0 | 516D105M350LM6AE3 | 0.248 x 0.630 [6.3 x 16.0] | 0.024 [0.6] | 0.25 | 12 |
| 2.2 | 516D225M350MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.25 | 24 |
| 3.3 | 516D335M350MN6AE3 | 0.315 x 0.787 [8.0 x 20.0] | 0.024 [0.6] | 0.25 | 32 |
| 4.7 | 516D475M350NP6AE3 | 0.394 x 0.827 [10.0 x 21.0] | 0.024 [0.6] | 0.25 | 46 |
| 10 | 516D106M350PR6AE3 | 0.512 x 1.024 [13.0 x 26.0] | 0.024 [0.6] | 0.25 | 85 |
| 22 | 516D226M350PS6AE3 | 0.512 x 1.240 [13.0 x 31.5] | 0.024 [0.6] | 0.25 | 140 |
| 33 | 516D336M350QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 0.25 | 190 |
| 47 | 516D476M350QT6AE3 | 0.630 x 1.633 [16.0 x 41.5] | 0.031 [0.8] | 0.25 | 260 |
| 400 WV_{DC} AT +85 °C, SURGE = 450 V | | | | | |
| 1.0 | 516D105M400MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.25 | 14 |
| 2.2 | 516D225M400MN6AE3 | 0.315 x 0.787 [8.0 x 20.0] | 0.024 [0.6] | 0.25 | 28 |
| 3.3 | 516D335M400NP6AE3 | 0.394 x 0.827 [10.0 x 21.0] | 0.024 [0.6] | 0.25 | 38 |
| 4.7 | 516D475M400NP6AE3 | 0.394 x 0.827 [10.0 x 21.0] | 0.024 [0.6] | 0.25 | 46 |
| 10 | 516D106M400PR6AE3 | 0.512 x 1.024 [13.0 x 26.0] | 0.024 [0.6] | 0.25 | 85 |
| 22 | 516D226M400QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 0.25 | 150 |
| 33 | 516D336M400QT6AE3 | 0.630 x 1.633 [16.0 x 41.5] | 0.031 [0.8] | 0.25 | 210 |
| 47 | 516D476M400RT6AE3 | 0.709 x 1.614 [18.0 x 41.0] | 0.031 [0.8] | 0.25 | 290 |
| 450 WV_{DC} AT +85 °C, SURGE = 500 V | | | | | |
| 1.0 | 516D105M450MM6AE3 | 0.315 x 0.630 [8.0 x 16.0] | 0.024 [0.6] | 0.25 | 14 |
| 2.2 | 516D225M450NP6AE3 | 0.394 x 0.827 [10.0 x 21.0] | 0.024 [0.6] | 0.25 | 31 |
| 3.3 | 516D335M450NP6AE3 | 0.394 x 0.827 [10.0 x 21.0] | 0.024 [0.6] | 0.25 | 38 |
| 4.7 | 516D475M450NR6AE3 | 0.394 x 1.024 [10.0 x 26.0] | 0.024 [0.6] | 0.25 | 50 |
| 10 | 516D106M450PR6AE3 | 0.512 x 1.024 [13.0 x 26.0] | 0.024 [0.6] | 0.25 | 85 |
| 22 | 516D226M450QS6AE3 | 0.630 x 1.240 [16.0 x 31.5] | 0.031 [0.8] | 0.25 | 150 |
| 33 | 516D336M450RT6AE3 | 0.709 x 1.614 [18.0 x 41.0] | 0.031 [0.8] | 0.25 | 230 |

Statements about product lifetime are based on calculations and internal testing. They should only be interpreted as estimations. Also due to external factors, the lifetime in the field application may deviate from the calculated lifetime. In general, nothing stated herein shall be construed as a guarantee of durability.



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