

SINGLE-ENDED LEADS - General purpose 85°C / 2000 h

Description

Capacitors for high density printed circuit board.

Applications

Coupling, decoupling, by-pass, filtering.

Features

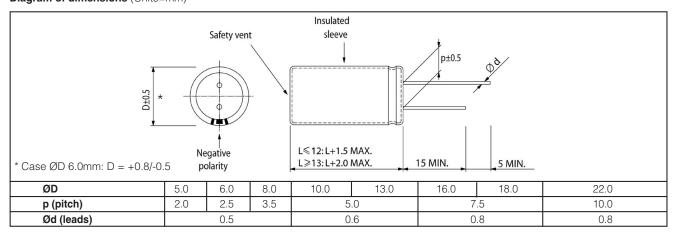
Case with $\emptyset D \ge 6.0$ mm has the safety vent at the bottom.

Marking

ARCOTRONICS' logo

Series: (ESK), Operating temperature: (85°C) Rated capacitance (μ F), Rated voltage: (Vdc), Negative polarity: (white line), Date code

Diagram of dimensions (Units=mm)



Electrical characteristics

| Rated voltage | 6.3 to 100 Vdc | 160 to 450 Vdc | | | |
|-----------------------|--|-------------------------|--|--|--|
| Operating temperature | -40 to +85°C | -25 to +85°C | | | |
| Capacitance range | 0.1μF to 22000μF | 0.47μF to 470μF. | | | |
| Capacitance tolerance | ± 20% at 120Hz / 20°C | | | | |
| Endurance test | 2000 hours (see conditions in Test method and performance) | | | | |
| Leakage current | I = 0.01 CV (μ A) or 3 μ A whichever is greater | I = 0.03 CV (μA) + 10μA | | | |
| Leanage current | C = rated capacitance (μF) ; V = rated voltage (Vdc) (after that DC rated voltage at 20°C has been applied for 2 min) | | | | |

Compensation factor of ripple current (R.C.) vs. frequency

| Rated voltage | Capacitance range | 50 Hz | 120 Hz | 300 Hz | 1 kHz | 10 to 100 kHz |
|----------------|-------------------|-------|--------|--------|-------|---------------|
| 6.3 to 100 Vdc | 0.1 to 68μF | 0.75 | 1.00 | 1.20 | 1.30 | 1.45 |
| 6.3 to 100 Vdc | 100 to 680μF | 0.75 | 1.00 | 1.10 | 1.15 | 1.25 |
| 6.3 to 100 Vdc | 1000 to 22000μF | 0.75 | 1.00 | 1.05 | 1.10 | 1.15 |
| 160 to 450 Vdc | 0.47 to 220μF | 0.80 | 1.00 | 1.25 | 1.40 | 1.40 |
| 160 to 450 Vdc | 330 to 470μF | 0.80 | 1.00 | 1.10 | 1.13 | 1.15 |

Compensation factor of ripple current (R.C.) vs. temperature

| Temperature | 50°C | 70°C | 85°C |
|--------------------|------|------|------|
| Multiplier factors | 1.30 | 1.15 | 1.00 |



SINGLE-ENDED LEADS - General purpose 85°C / 2000 h

Test method and performance

| Conditions | Load life test | Shelf life test | | |
|--|--|--|--|--|
| Temperature: | 85°C | 85°C | | |
| Test duration: | 2000 hours | 1000 hours | | |
| Ripple current: Voltage: | max ripple current at 120Hz 85°C specified in the table. the sum of D.C. voltage and the peak A.C. voltage must not exceed the rated voltage of capacitor. | no ripple current applied no voltage applied. | | |
| Performance | The following specifications will be satisfied when t | he capacitors are restored at 20°C | | |
| Capacitance change: Dissipation factor: Leakage current: | within 20% of initial value. not exceed 200% of the initial requirement. not exceed initial requirement. | within 20% of initial value. not exceed 200% of the initial requirement. not exceed initial requirement. | | |

Technical data and ordering codes

| | 6.3 Vdc | Rated vol | tage - 8 Vo | lc Surge | voltage |
|------------|---------|-----------|----------------------|----------|-----------------|
| Rated cap. | Case | D.F. | R.C. | L.C. | |
| 120 Hz | size | 120 Hz | 120 Hz | 20°C | Arcotronics P/N |
| 20°C | DxL | 25°C | 85°C | 2 min. | |
| (μF) | (mm) | (tgδ %) | (mA _{rms}) | (μΑ) | |
| 22 | 5 x 11 | 22 | 35 | 3 | ESK226M6R3AC3AA |
| 33 | 5 x 11 | 22 | 55 | 3 | ESK336M6R3AC3AA |
| 47 | 5 x 11 | 22 | 75 | 3 | ESK476M6R3AC3AA |
| 100 | 5 x 11 | 22 | 130 | 6 | ESK107M6R3AC3AA |
| 220 | 5 x 11 | 22 | 200 | 14 | ESK227M6R3AC3AA |
| 220 | 6 x 11 | 22 | 240 | 14 | ESK227M6R3AE3AA |
| 330 | 6 x 11 | 22 | 260 | 21 | ESK337M6R3AE3AA |
| 330 | 8 x 11 | 22 | 300 | 21 | ESK337M6R3AG3AA |
| 470 | 6 x 11 | 22 | 330 | 30 | ESK477M6R3AE3AA |
| 470 | 8 x 11 | 22 | 380 | 30 | ESK477M6R3AG3AA |
| 1000 | 8 x 11 | 22 | 460 | 63 | ESK108M6R3AG3AA |
| 1000 | 10 x 12 | 22 | 580 | 63 | ESK108M6R3AH1AA |
| 2200 | 10 x 19 | 22 | 840 | 139 | ESK228M6R3AH4AA |
| 2200 | 13 x 20 | 22 | 1050 | 139 | ESK228M6R3AL3AA |
| 3300 | 10 x 19 | 22 | 1000 | 208 | ESK338M6R3AH4AA |
| 3300 | 13 x 20 | 22 | 1250 | 208 | ESK338M6R3AL3AA |
| 4700 | 13 x 20 | 22 | 1300 | 296 | ESK478M6R3AL3AA |
| 4700 | 16 x 25 | 22 | 1700 | 296 | ESK478M6R3AM7AA |
| 6800 | 16 x 25 | 22 | 1900 | 428 | ESK688M6R3AM7AA |
| 10000 | 16 x 25 | 22 | 1900 | 630 | ESK109M6R3AM7AA |
| 10000 | 16 x 32 | 22 | 2250 | 630 | ESK109M6R3AM2AA |
| 15000 | 16 x 36 | 22 | 2500 | 945 | ESK159M6R3AM3AA |
| 15000 | 18 x 36 | 22 | 2880 | 945 | ESK159M6R3AN2AA |
| 22000 | 18 x 40 | 22 | 3650 | 1386 | ESK229M6R3AN3AA |

| | 10 Vdc Rated voltage - 13 Vdc Surge voltage | | | | | | |
|--------------------------------------|---|-----------------------------------|--|--------------------------------|-----------------|--|--|
| Rated cap. 120 Hz 20°C (µF) | Case size DxL (mm) | D.F. 120 Hz 25°C (tgδ %) | R.C. 120 Hz 85°C (mA _{rms}) | L.C. 20°C 2 min. (μΑ) | Arcotronics P/N | | |
| 4.7 | 5 x 11 | 19 | 20 | 3 | ESK475M010AC3AA | | |
| 10 | 5 x 11 | 19 | 35 | 3 | ESK106M010AC3AA | | |
| 22 | 5 x 11 | 19 | 55 | 3 | ESK226M010AC3AA | | |
| 33 | 5 x 11 | 19 | 80 | 3 | ESK336M010AC3AA | | |
| 47 | 5 x 11 | 19 | 95 | 5 | ESK476M010AC3AA | | |
| 100 | 5 x 11 | 19 | 180 | 10 | ESK107M010AC3AA | | |
| 220 | 5 x 11 | 19 | 230 | 22 | ESK227M010AC3AA | | |
| 220 | 6 x 11 | 19 | 250 | 22 | ESK227M010AE3AA | | |
| 330 | 8 x 11 | 19 | 330 | 33 | ESK337M010AG3AA | | |
| 470 | 6 x 11 | 19 | 360 | 47 | ESK477M010AE3AA | | |
| 470 | 8 x 11 | 19 | 400 | 47 | ESK477M010AG3AA | | |
| 680 | 8 x 15 | 19 | 430 | 68 | ESK687M010AG4AA | | |
| 680 | 10 x 15 | 19 | 460 | 68 | ESK687M010AH2AA | | |
| 1000 | 10 x 12 | 19 | 580 | 100 | ESK108M010AH1AA | | |
| 1000 | 10 x 15 | 19 | 630 | 100 | ESK108M010AH2AA | | |
| 2200 | 10 x 19 | 19 | 880 | 220 | ESK228M010AH4AA | | |
| 2200 | 13 x 20 | 19 | 1100 | 220 | ESK228M010AL3AA | | |
| 3300 | 13 x 20 | 19 | 1250 | 330 | ESK338M010AL3AA | | |
| 3300 | 13 x 25 | 19 | 1400 | 330 | ESK338M010AL4AA | | |
| 4700 | 13 x 25 | 19 | 1500 | 470 | ESK478M010AL4AA | | |
| 4700 | 16 x 25 | 19 | 1800 | 470 | ESK478M010AM7AA | | |
| 6800 | 16 x 25 | 19 | 1900 | 680 | ESK688M010AM7AA | | |
| 6800 | 16 x 32 | 19 | 2150 | 680 | ESK688M010AM2AA | | |
| 10000 | 16 x 36 | 19 | 2500 | 1000 | ESK109M010AM3AA | | |
| 10000 | 18 x 36 | 19 | 2500 | 1000 | ESK109M010AN2AA | | |
| 15000 | 18 x 36 | 19 | 2950 | 1500 | ESK159M010AN2AA | | |
| 22000 | 22 x 40 | 19 | 3700 | 2200 | ESK229M010AQ4AA | | |

For capacitor whose capacitance exceeds 1000 μF the value of D.F. (%) is increased by 2% for every addition of 1000 μF



SINGLE-ENDED LEADS - General purpose 85°C / 2000 h

| | 16 Vdc Rated voltage - 20 Vdc Surge voltage | | | | | | |
|------------|---|---------|----------------------|--------|-------------------|--|--|
| Rated cap. | | | | | | | |
| 120 Hz | size | 120 Hz | 120 Hz | 20°C | Arcotronics P/N | | |
| 20°C | DxL | 25°C | 85°C | 2 min. | 71100110111031711 | | |
| (μF) | (mm) | (tgδ %) | (mA _{rms}) | (μA) | | | |
| 1.0 | 5 x 11 | 16 | 9.3 | 3 | ESK105M016AC3AA | | |
| 4.7 | 5 x 11 | 16 | 25 | 3 | ESK475M016AC3AA | | |
| 10 | 5 x 11 | 16 | 40 | 3 | ESK106M016AC3AA | | |
| 22 | 5 x 11 | 16 | 75 | 4 | ESK226M016AC3AA | | |
| 33 | 5 x 11 | 16 | 110 | 5 | ESK336M016AC3AA | | |
| 47 | 5 x 11 | 16 | 130 | 7 | ESK476M016AC3AA | | |
| 100 | 5 x 11 | 16 | 185 | 16 | ESK107M016AC3AA | | |
| 100 | 6 x 11 | 16 | 185 | 16 | ESK107M016AE3AA | | |
| 220 | 6 x 11 | 16 | 320 | 35 | ESK227M016AE3AA | | |
| 220 | 8 x 11 | 16 | 320 | 35 | ESK227M016AG3AA | | |
| 330 | 8 x 11 | 16 | 360 | 53 | ESK337M016AG3AA | | |
| 470 | 8 x 11 | 16 | 400 | 75 | ESK477M016AG3AA | | |
| 470 | 10 x 12 | 16 | 470 | 75 | ESK477M016AH1AA | | |
| 680 | 10 x 15 | 16 | 560 | 109 | ESK687M016AH2AA | | |
| 1000 | 10 x 15 | 16 | 630 | 160 | ESK108M016AH2AA | | |
| 1000 | 10 x 19 | 16 | 790 | 160 | ESK108M016AH4AA | | |
| 2200 | 13 x 20 | 16 | 1100 | 352 | ESK228M016AL3AA | | |
| 2200 | 13 x 25 | 16 | 1350 | 352 | ESK228M016AL4AA | | |
| 3300 | 13 x 25 | 16 | 1400 | 528 | ESK338M016AL4AA | | |
| 3300 | 16 x 25 | 16 | 1700 | 528 | ESK338M016AM7AA | | |
| 4700 | 16 x 25 | 16 | 1800 | 752 | ESK478M016AM7AA | | |
| 4700 | 16 x 32 | 16 | 2100 | 752 | ESK478M016AM2AA | | |
| 6800 | 16 x 36 | 16 | 2200 | 1088 | ESK688M016AM3AA | | |
| 6800 | 18 x 36 | 16 | 2500 | 1088 | ESK688M016AN2AA | | |
| 10000 | 18 x 36 | 16 | 2700 | 1600 | ESK109M016AN2AA | | |
| 15000 | 22 x 40 | 16 | 3150 | 2400 | ESK159M016AQ4AA | | |
| 22000 | 22 x 40 | 16 | 3800 | 3520 | ESK229M016AQ4AA | | |

| | 27VI B. I. II. 22VI 2 | | | | | | |
|------------|---|---------|----------------------|--------|-----------------|--|--|
| | 25 Vdc Rated voltage - 32 Vdc Surge voltage | | | | | | |
| Rated cap. | Case | D.F. | R.C. | L.C. | A | | |
| 120 Hz | size | 120 Hz | 120 Hz | 20°C | Arcotronics P/N | | |
| 20°C | DxL | 25°C | 85°C | 2 min. | | | |
| (μF) | (mm) | (tgδ %) | (mA _{rms}) | (μA) | | | |
| 4.7 | 5 x 11 | 14 | 30 | 3 | ESK475M025AC3AA | | |
| 10 | 5 x 11 | 14 | 50 | 3 | ESK106M025AC3AA | | |
| 22 | 5 x 11 | 14 | 90 | 5 | ESK226M025AC3AA | | |
| 33 | 5 x 11 | 14 | 115 | 8 | ESK336M025AC3AA | | |
| 47 | 5 x 11 | 14 | 135 | 12 | ESK476M025AC3AA | | |
| 100 | 6 x 11 | 14 | 200 | 25 | ESK107M025AE3AA | | |
| 220 | 8 x 11 | 14 | 290 | 55 | ESK227M025AG3AA | | |
| 220 | 10 x 12 | 14 | 340 | 55 | ESK227M025AH1AA | | |
| 330 | 8 x 15 | 14 | 380 | 82 | ESK337M025AG4AA | | |
| 330 | 10 x 12 | 14 | 420 | 82 | ESK337M025AH1AA | | |
| 330 | 10 x 15 | 14 | 420 | 82 | ESK337M025AH2AA | | |
| 470 | 10 x 12 | 14 | 460 | 117 | ESK477M025AH1AA | | |
| 470 | 10 x 15 | 14 | 540 | 117 | ESK477M025AH2AA | | |
| 1000 | 10 x 19 | 14 | 760 | 250 | ESK108M025AH4AA | | |
| 1000 | 13 x 20 | 14 | 950 | 250 | ESK108M025AL3AA | | |
| 2200 | 13 x 25 | 14 | 1300 | 550 | ESK228M025AL4AA | | |
| 2200 | 16 x 25 | 14 | 1550 | 550 | ESK228M025AM7AA | | |
| 3300 | 16 x 25 | 14 | 1660 | 825 | ESK338M025AM7AA | | |
| 3300 | 16 x 32 | 14 | 1950 | 825 | ESK338M025AM2AA | | |
| 4700 | 16 x 32 | 14 | 1950 | 1175 | ESK478M025AM2AA | | |
| 4700 | 18 x 36 | 14 | 2360 | 1175 | ESK478M025AN2AA | | |
| 6800 | 18 x 36 | 14 | 2550 | 1700 | ESK688M025AN2AA | | |
| 10000 | 22 x 40 | 14 | 2800 | 2500 | ESK109M025AQ4AA | | |
| 15000 | 22 x 40 | 14 | 3200 | 3750 | ESK159M025AQ4AA | | |

| | 35 Vdc F | ated volta | age - 44 Vd | lc Surge v | /oltage |
|------------|----------|------------|----------------------|------------|-----------------|
| Rated cap. | Case | D.F. | R.C. | L.C. | |
| 120 Hz | size | 120 Hz | 120 Hz | 20°C | Arcotronics P/N |
| 20°C | DxL | 25°C | 85°C | 2 min. | |
| (μF) | (mm) | (tgδ %) | (mA _{rms}) | (μΑ) | |
| 4.7 | 5 x 11 | 12 | 35 | 3 | ESK475M035AC3AA |
| 10 | 5 x 11 | 12 | 60 | 3 | ESK106M035AC3AA |
| 22 | 5 x 11 | 12 | 95 | 8 | ESK226M035AC3AA |
| 33 | 5 x 11 | 12 | 120 | 11 | ESK336M035AC3AA |
| 47 | 5 x 11 | 12 | 120 | 16 | ESK476M035AC3AA |
| 47 | 6 x 11 | 12 | 140 | 16 | ESK476M035AE3AA |
| 100 | 6 x 11 | 12 | 200 | 35 | ESK107M035AE3AA |
| 100 | 8 x 11 | 12 | 230 | 35 | ESK107M035AG3AA |
| 220 | 8 x 11 | 12 | 290 | 77 | ESK227M035AG3AA |
| 220 | 10 x 12 | 12 | 370 | 77 | ESK227M035AH1AA |
| 330 | 10 x 12 | 12 | 420 | 115 | ESK337M035AH1AA |
| 330 | 10 x 15 | 12 | 490 | 115 | ESK337M035AH2AA |
| 470 | 10 x 15 | 12 | 480 | 164 | ESK477M035AH2AA |
| 470 | 10 x 19 | 12 | 510 | 164 | ESK477M035AH4AA |
| 470 | 13 x 20 | 12 | 640 | 164 | ESK477M035AL3AA |
| 1000 | 13 x 20 | 12 | 950 | 350 | ESK108M035AL3AA |
| 1000 | 13 x 25 | 12 | 1100 | 350 | ESK108M035AL4AA |
| 2200 | 16 x 25 | 12 | 1600 | 770 | ESK228M035AM7AA |
| 2200 | 16 x 32 | 12 | 1800 | 770 | ESK228M035AM2AA |
| 3300 | 16 x 36 | 12 | 1970 | 1155 | ESK338M035AM3AA |
| 3300 | 18 x 36 | 12 | 2220 | 1155 | ESK338M035AN2AA |
| 4700 | 18 x 36 | 12 | 2400 | 1645 | ESK478M035AN2AA |
| 6800 | 22 x 40 | 12 | 2600 | 2380 | ESK688M035AQ4AA |

| | 50 Vdc Rated voltage - 63 Vdc Surge voltage | | | | | | |
|--------------------------------------|---|-----------------------------------|--|--------------------------------|-----------------|--|--|
| | | | | | /oltage | | |
| Rated cap. 120 Hz 20°C (µF) | Case size DxL (mm) | D.F. 120 Hz 25°C (tg8 %) | R.C. 120 Hz 85°C (mA _{rms}) | L.C. 20°C 2 min. (μΑ) | Arcotronics P/N | | |
| 0.1 | 5 x 11 | 10 | 1 | 3 | ESK104M050AC3AA | | |
| 0.22 | 5 x 11 | 10 | 2 | 3 | ESK224M050AC3AA | | |
| 0.33 | 5 x 11 | 10 | 3 | 3 | ESK334M050AC3AA | | |
| 0.47 | 5 x 11 | 10 | 5 | 3 | ESK474M050AC3AA | | |
| 1.0 | 5 x 11 | 10 | 10 | 3 | ESK105M050AC3AA | | |
| 2.2 | 5 x 11 | 10 | 23 | 3 | ESK225M050AC3AA | | |
| 3.3 | 5 x 11 | 10 | 35 | 3 | ESK335M050AC3AA | | |
| 4.7 | 5 x 11 | 10 | 40 | 3 | ESK475M050AC3AA | | |
| 10 | 5 x 11 | 10 | 65 | 5 | ESK106M050AC3AA | | |
| 22 | 5 x 11 | 10 | 100 | 11 | ESK226M050AC3AA | | |
| 33 | 6 x 11 | 10 | 125 | 16 | ESK336M050AE3AA | | |
| 47 | 6 x 11 | 10 | 140 | 23 | ESK476M050AE3AA | | |
| 47 | 8 x 11 | 10 | 150 | 23 | ESK476M050AG3AA | | |
| 100 | 8 x 11 | 10 | 230 | 50 | ESK107M050AG3AA | | |
| 100 | 10 x 12 | 10 | 250 | 50 | ESK107M050AH1AA | | |
| 220 | 10 x 12 | 10 | 360 | 110 | ESK227M050AH1AA | | |
| 220 | 10 x 15 | 10 | 440 | 110 | ESK227M050AH2AA | | |
| 330 | 10 x 15 | 10 | 490 | 165 | ESK337M050AH2AA | | |
| 330 | 10 x 19 | 10 | 580 | 165 | ESK337M050AH4AA | | |
| 470 | 10 x 19 | 10 | 610 | 235 | ESK477M050AH4AA | | |
| 470 | 13 x 20 | 10 | 760 | 235 | ESK477M050AL3AA | | |
| 1000 | 13 x 25 | 10 | 1100 | 500 | ESK108M050AL4AA | | |
| 1000 | 16 x 25 | 10 | 1350 | 500 | ESK108M050AM7AA | | |
| 2200 | 16 x 36 | 10 | 1850 | 1100 | ESK228M050AM3AA | | |
| 2200 | 18 x 36 | 10 | 2090 | 1100 | ESK228M050AN2AA | | |
| 3300 | 18 x 36 | 10 | 2170 | 1650 | ESK338M050AN2AA | | |
| 3300 | 18 x 40 | 10 | 2400 | 1650 | ESK338M050AN3AA | | |
| 4700 | 22 x 35 | 10 | 2500 | 2350 | ESK478M050AQ3AA | | |
| 4700 | 22 x 40 | 10 | 2500 | 2350 | ESK478M050AQ4AA | | |

For capacitor whose capacitance exceeds 1000 μF the value of D.F. (%) is increased by 2% for every addition of 1000 μF



SINGLE-ENDED LEADS - General purpose 85°C / 2000 h

| | 63 Vdc Rated voltage - 79 Vdc Surge voltage | | | | | | |
|--------------------------------------|---|-----------------------------------|--|--------------------------------|-----------------|--|--|
| Rated cap. 120 Hz 20°C (µF) | Case size DxL (mm) | D.F. 120 Hz 25°C (tg8 %) | R.C. 120 Hz 85°C (mA _{rms}) | L.C. 20°C 2 min. (μΑ) | Arcotronics P/N | | |
| 0.47 | 5 x 11 | 9 | 5 | 3 | ESK474M063AC3AA | | |
| 1.0 | 5 x 11 | 9 | 10 | 3 | ESK105M063AC3AA | | |
| 2.2 | 5 x 11 | 9 | 29 | 3 | ESK225M063AC3AA | | |
| 3.3 | 5 x 11 | 9 | 40 | 3 | ESK335M063AC3AA | | |
| 4.7 | 5 x 11 | 9 | 45 | 3 | ESK475M063AC3AA | | |
| 10 | 5 x 11 | 9 | 70 | 6 | ESK106M063AC3AA | | |
| 22 | 6 x 11 | 9 | 115 | 14 | ESK226M063AE3AA | | |
| 33 | 6 x 11 | 9 | 130 | 21 | ESK336M063AE3AA | | |
| 33 | 8 x 11 | 9 | 140 | 21 | ESK336M063AG3AA | | |
| 47 | 6 x 11 | 9 | 190 | 30 | ESK476M063AE3AA | | |
| 47 | 8 x 11 | 9 | 190 | 30 | ESK476M063AG3AA | | |
| 100 | 10 x 12 | 9 | 300 | 63 | ESK107M063AH1AA | | |
| 220 | 10 x 15 | 9 | 410 | 139 | ESK227M063AH2AA | | |
| 220 | 10 x 19 | 9 | 490 | 139 | ESK227M063AH4AA | | |
| 330 | 10 x 19 | 9 | 540 | 208 | ESK337M063AH4AA | | |
| 330 | 13 x 20 | 9 | 680 | 208 | ESK337M063AL3AA | | |
| 470 | 13 x 25 | 9 | 880 | 296 | ESK477M063AL4AA | | |
| 1000 | 16 x 25 | 9 | 1310 | 630 | ESK108M063AM7AA | | |
| 1000 | 16 x 32 | 9 | 1550 | 630 | ESK108M063AM2AA | | |
| 2200 | 18 x 40 | 9 | 2200 | 1386 | ESK228M063AN3AA | | |
| 3300 | 22 x 40 | 9 | 2500 | 2079 | ESK338M063AQ4AA | | |

| | 100 Vdc | Rated vol | tage - 125 | Vdc Surg | 100 Vdc Rated voltage - 125 Vdc Surge voltage | | | | | | |
|--------------------------------------|-----------------------------|-----------------------------------|--|--------------------------------|---|--|--|--|--|--|--|
| Rated cap. 120 Hz 20°C (µF) | Case size DxL (mm) | D.F. 120 Hz 25°C (tg8 %) | R.C. 120 Hz 85°C (mA _{rms}) | L.C. 20°C 2 min. (μΑ) | Arcotronics P/N | | | | | | |
| 0.47 | 5 x 11 | 8 | 10 | 3 | ESK474M100AC3AA | | | | | | |
| 1.0 | 5 x 11 | 8 | 21 | 3 | ESK105M100AC3AA | | | | | | |
| 2.2 | 5 x 11 | 8 | 30 | 3 | ESK225M100AC3AA | | | | | | |
| 3.3 | 5 x 11 | 8 | 45 | 3 | ESK335M100AC3AA | | | | | | |
| 4.7 | 5 x 11 | 8 | 50 | 5 | ESK475M100AC3AA | | | | | | |
| 10 | 6 x 11 | 8 | 75 | 10 | ESK106M100AE3AA | | | | | | |
| 22 | 8 x 11 | 8 | 130 | 12 | ESK226M100AG3AA | | | | | | |
| 33 | 8 x 11 | 8 | 140 | 33 | ESK336M100AG3AA | | | | | | |
| 33 | 10 x 12 | 8 | 170 | 33 | ESK336M100AH1AA | | | | | | |
| 47 | 10 x 12 | 8 | 190 | 47 | ESK476M100AH1AA | | | | | | |
| 47 | 10 x 15 | 8 | 230 | 47 | ESK476M100AH2AA | | | | | | |
| 100 | 10 x 19 | 8 | 400 | 160 | ESK107M100AH4AA | | | | | | |
| 220 | 13 x 25 | 8 | 710 | 220 | ESK227M100AL4AA | | | | | | |
| 330 | 13 x 25 | 8 | 720 | 330 | ESK337M100AL4AA | | | | | | |
| 330 | 16 x 25 | 8 | 860 | 330 | ESK337M100AM7AA | | | | | | |
| 470 | 16 x 25 | 8 | 1100 | 470 | ESK477M100AM7AA | | | | | | |
| 1000 | 16 x 32 | 8 | 1350 | 1000 | ESK108M100AM2AA | | | | | | |
| 1000 | 18 x 40 | 8 | 1680 | 1000 | ESK108M100AN3AA | | | | | | |
| 2200 | 22 x 40 | 8 | 2300 | 2200 | ESK228M100AQ4AA | | | | | | |

| 160 Vdc Rated voltage - 200 Vdc Surge voltage | | | | | | |
|---|---------------------|------------------------|------------------------|------------------------|--------------------------|--|
| Rated cap. 120 Hz 20°C | Case size DxL | D.F. 120 Hz 25°C | R.C. 120 Hz 85°C | L.C. 20°C 2 min. | Arcotronics P/N | |
| (μF) | (mm) | (tgδ %) | (mA _{rms}) | (μA) | FOX 47 41 44 CO A CO A A | |
| 0.47 | 5 x 11 | 15 | 12 | 12 | ESK474M160AC3AA | |
| 1.0 | 5 x 11 | 15 | 17 | 15 | ESK105M160AC3AA | |
| 2.2 | 6 x 11 | 15 | 26 | 20 | ESK225M160AE3AA | |
| 3.3 | 6 x 11 | 15 | 30 | 26 | ESK335M160AE3AA | |
| 3.3 | 8 x 11 | 15 | 35 | 26 | ESK335M160AG3AA | |
| 4.7 | 6 x 11 | 15 | 32 | 32 | ESK475M160AE3AA | |
| 4.7 | 8 x 11 | 15 | 40 | 32 | ESK475M160AG3AA | |
| 10 | 8 x 11 | 15 | 50 | 58 | ESK106M160AG3AA | |
| 10 | 10 x 12 | 15 | 65 | 58 | ESK106M160AH1AA | |
| 22 | 10 x 15 | 15 | 110 | 116 | ESK226M160AH2AA | |
| 33 | 10 x 19 | 15 | 150 | 168 | ESK336M160AH4AA | |
| 47 | 13 x 20 | 15 | 180 | 236 | ESK476M160AL3AA | |
| 100 | 13 x 25 | 15 | 250 | 490 | ESK107M160AL4AA | |
| 100 | 16 x 25 | 15 | 300 | 490 | ESK107M160AM7AA | |
| 220 | 16 x 32 | 15 | 450 | 1066 | ESK227M160AM2AA | |
| 220 | 16 x 36 | 15 | 510 | 1066 | ESK227M160AM3AA | |
| 330 | 18 x 36 | 15 | 540 | 1594 | ESK337M160AN2AA | |
| 330 | 18 x 40 | 15 | 600 | 1594 | ESK337M160AN3AA | |
| 470 | 22 x 40 | 15 | 900 | 2266 | ESK477M160AQ4AA | |

| 200 Vdc Rated voltage - 250 Vdc Surge voltage | | | | | | |
|---|---------------------|------------------------|------------------------|------------------------|-----------------|--|
| Rated cap. 120 Hz 20°C | Case size DxL | D.F. 120 Hz 25°C | R.C. 120 Hz 85°C | L.C. 20°C 2 min. | Arcotronics P/N | |
| (μF) 0.47 | (mm) 5 x 11 | (tgδ %) | (mA _{rms}) | (μA) | ESK474M200AC3AA | |
| 1.0 | 5 x 11 | 15 15 | 19 | 13 16 | ESK105M200AC3AA | |
| 2.2 | 6 x 11 | 15 | 22 | 23 | ESK225M200AE3AA | |
| 2.2 | 8 x 11 | 15 | 27 | 23 | ESK225M200AG3AA | |
| 3.3 | 6 x 11 | 15 | 30 | 30 | ESK335M200AE3AA | |
| 3.3 | 8 x 11 | 15 | 37 | 30 | ESK335M200AG3AA | |
| 4.7 | 8 x 11 | 15 | 36 | 38 | ESK475M200AG3AA | |
| 4.7 | 10 x 12 | 15 | 45 | 38 | ESK475M200AH1AA | |
| 10 | 10 x 12 | 15 | 57 | 70 | ESK106M200AH1AA | |
| 10 | 10 x 15 | 15 | 70 | 70 | ESK106M200AH2AA | |
| 22 | 10 x 15 | 15 | 120 | 142 | ESK226M200AH2AA | |
| 33 | 10 x 19 | 15 | 160 | 208 | ESK336M200AH4AA | |
| 47 | 13 x 20 | 15 | 160 | 292 | ESK476M200AL3AA | |
| 47 | 13 x 25 | 15 | 190 | 292 | ESK476M200AL4AA | |
| 100 | 16 x 25 | 15 | 330 | 610 | ESK107M200AM7AA | |
| 220 | 18 x 32 | 15 | 600 | 1330 | ESK227M200AN1AA | |
| 220 | 18 x 36 | 15 | 600 | 1330 | ESK227M200AN2AA | |
| 330 | 18 x 36 | 15 | 800 | 1990 | ESK337M200AN2AA | |
| 330 | 18 x 40 | 15 | 800 | 1990 | ESK337M200AN3AA | |
| 470 | 18 x 40 | 15 | 1000 | 2830 | ESK477M200AN3AA | |

For capacitor whose capacitance exceeds 1000 μF the value of D.F. (%) is increased by 2% for every addition of 1000 μF



SINGLE-ENDED LEADS - General purpose 85°C / 2000 h

| 250 Vdc Rated voltage - 300 Vdc Surge voltage | | | | | | |
|---|-----------------------------|--|--|--------------------------------|-----------------|--|
| Rated cap. 120 Hz 20°C (µF) | Case size DxL (mm) | D.F. 120 Hz 25°C (tg\delta\delta) | R.C. 120 Hz 85°C (mA _{rms}) | L.C. 20°C 2 min. (μΑ) | Arcotronics P/N | |
| 0.47 | 5 x 11 | 15 | 14 | 13 | ESK474M250AC3AA | |
| 1.0 | 6 x 11 | 15 | 19 | 17 | ESK105M250AE3AA | |
| 2.2 | 6 x 11 | 15 | 24 | 26 | ESK225M250AE3AA | |
| 2.2 | 8 x 11 | 15 | 30 | 26 | ESK225M250AG3AA | |
| 3.3 | 8 x 11 | 15 | 30 | 35 | ESK335M250AG3AA | |
| 3.3 | 10 x 12 | 15 | 38 | 35 | ESK335M250AH1AA | |
| 4.7 | 8 x 11 | 15 | 36 | 45 | ESK475M250AG3AA | |
| 4.7 | 10 x 12 | 15 | 45 | 45 | ESK475M250AH1AA | |
| 10 | 10 x 12 | 15 | 70 | 85 | ESK106M250AH1AA | |
| 10 | 10 x 15 | 15 | 70 | 85 | ESK106M250AH2AA | |
| 22 | 10 x 19 | 15 | 130 | 175 | ESK226M250AH4AA | |
| 33 | 13 x 20 | 15 | 140 | 257 | ESK336M250AL3AA | |
| 33 | 13 x 25 | 15 | 160 | 257 | ESK336M250AL4AA | |
| 47 | 13 x 25 | 15 | 210 | 362 | ESK476M250AL4AA | |
| 100 | 16 x 32 | 15 | 310 | 760 | ESK107M250AM2AA | |
| 220 | 18 x 40 | 15 | 600 | 1660 | ESK227M250AN3AA | |

| 350 Vdc Rated voltage - 400 Vdc Surge voltage | | | | | | |
|---|---------|---------|----------------------|--------|-----------------|--|
| Rated cap. | Case | D.F. | R.C. | L.C. | | |
| 120 Hz | size | 120 Hz | 120 Hz | 20°C | Arcotronics P/N | |
| 20°C | DxL | 25°C | 85°C | 2 min. | | |
| (μF) | (mm) | (tgδ %) | (mA _{rms}) | (µA) | | |
| 0.47 | 5 x 11 | 20 | 14 | 15 | ESK474M350AC3AA | |
| 1.0 | 6 x 11 | 20 | 19 | 20 | ESK105M350AE3AA | |
| 2.2 | 8 x 11 | 20 | 33 | 33 | ESK225M350AG3AA | |
| 3.3 | 8 x 11 | 20 | 33 | 45 | ESK335M350AG3AA | |
| 3.3 | 10 x 12 | 20 | 39 | 45 | ESK335M350AH1AA | |
| 4.7 | 10 x 12 | 20 | 39 | 59 | ESK475M350AH1AA | |
| 4.7 | 10 x 15 | 20 | 45 | 59 | ESK475M350AH2AA | |
| 10 | 10 x 15 | 20 | 70 | 115 | ESK106M350AH2AA | |
| 22 | 13 x 20 | 20 | 130 | 241 | ESK226M350AL3AA | |
| 33 | 13 x 25 | 20 | 170 | 356 | ESK336M350AL4AA | |
| 47 | 16 x 25 | 20 | 220 | 503 | ESK476M350AM7AA | |
| 100 | 18 x 36 | 20 | 360 | 1060 | ESK107M350AN2AA | |

| 400 Vdc Rated voltage - 450 Vdc Surge voltage | | | | | | |
|---|-----------------------------|-----------------------------------|--|--------------------------------|-----------------|--|
| Rated cap. 120 Hz 20°C (µF) | Case size DxL (mm) | D.F. 120 Hz 25°C (tgδ %) | R.C. 120 Hz 85°C (mA _{rms}) | L.C. 20°C 2 min. (μΑ) | Arcotronics P/N | |
| 0.47 | 6 x 11 | 20 | 14 | 16 | ESK474M400AE3AA | |
| 1.0 | 6 x 11 | 20 | 19 | 22 | ESK105M400AE3AA | |
| 1.0 | 8 x 11 | 20 | 19 | 22 | ESK105M400AG3AA | |
| 2.2 | 8 x 11 | 20 | 26 | 36 | ESK225M400AG3AA | |
| 2.2 | 10 x 12 | 20 | 33 | 36 | ESK225M400AH1AA | |
| 3.3 | 10 x 12 | 20 | 40 | 50 | ESK335M400AH1AA | |
| 4.7 | 10 x 15 | 20 | 45 | 66 | ESK475M400AH2AA | |
| 10 | 10 x 19 | 20 | 56 | 130 | ESK106M400AH4AA | |
| 10 | 13 x 20 | 20 | 70 | 130 | ESK106M400AL3AA | |
| 22 | 13 x 25 | 20 | 110 | 274 | ESK226M400AL4AA | |
| 22 | 16 x 25 | 20 | 130 | 274 | ESK226M400AM7AA | |
| 33 | 16 x 25 | 20 | 170 | 406 | ESK336M400AM7AA | |
| 33 | 18 x 20 | 20 | 130 | 406 | ESK336M400AN4AA | |
| 47 | 16 x 25 | 20 | 180 | 574 | ESK476M400AM7AA | |
| 47 | 16 x 32 | 20 | 220 | 574 | ESK476M400AM2AA | |
| 100 | 18 x 36 | 20 | 360 | 1210 | ESK107M400AN2AA | |

| 450 Vdc Rated voltage - 500 Vdc Surge voltage | | | | | | |
|---|-----------------------------|-----------------------------------|--|--------------------------------|-----------------|--|
| Rated cap. 120 Hz 20°C (µF) | Case size DxL (mm) | D.F. 120 Hz 25°C (tqδ %) | R.C. 120 Hz 85°C (mA _{rms}) | L.C. 20°C 2 min. (μΑ) | Arcotronics P/N | |
| 0.47 | 6 x 11 | 20 | 14 | 16 | ESK474M450AE3AA | |
| 1.0 | 8 x 11 | 20 | 19 | 23 | ESK105M450AG3AA | |
| 2.2 | 10 x 12 | 20 | 33 | 40 | ESK225M450AH1AA | |
| 3.3 | 10 x 15 | 20 | 42 | 54 | ESK335M450AH2AA | |
| 4.7 | 10 x 15 | 20 | 50 | 73 | ESK475M450AH2AA | |
| 10 | 13 x 20 | 20 | 60 | 145 | ESK106M450AL3AA | |
| 10 | 13 x 25 | 20 | 75 | 145 | ESK106M450AL4AA | |
| 22 | 16 x 25 | 20 | 130 | 307 | ESK226M450AM7AA | |
| 33 | 16 x 32 | 20 | 160 | 455 | ESK336M450AM2AA | |
| 33 | 16 x 36 | 20 | 180 | 455 | ESK336M450AM3AA | |
| 47 | 18 x 36 | 20 | 200 | 644 | ESK476M450AN2AA | |
| 47 | 18 x 40 | 20 | 230 | 644 | ESK476M450AN3AA | |
| 100 | 22 x 40 | 20 | 370 | 1360 | ESK107M450AQ4AA | |

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