



FEATURES

Male/female lead styles - High voltage/current - Low ESR

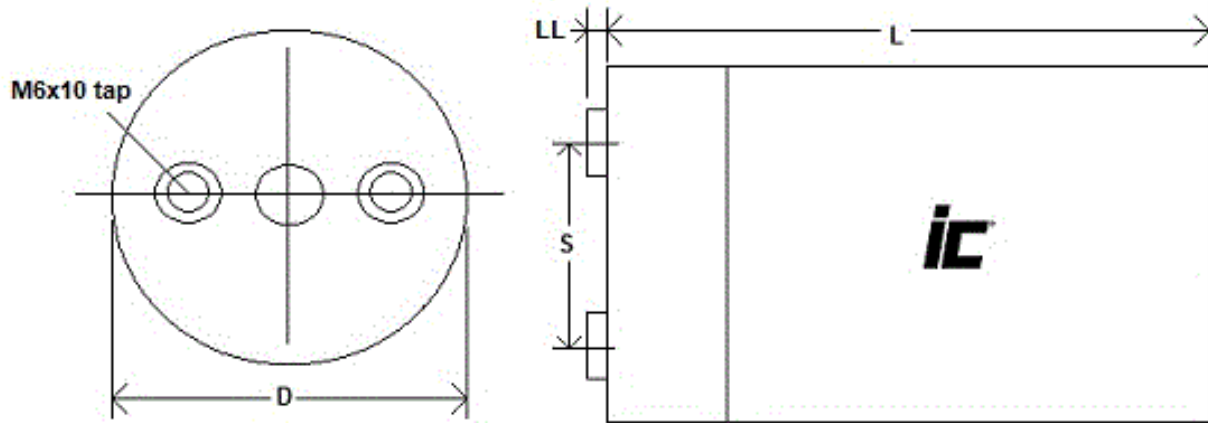
APPLICATIONS

Induction heaters - DC link - AC/DC motor controls - Power inverters

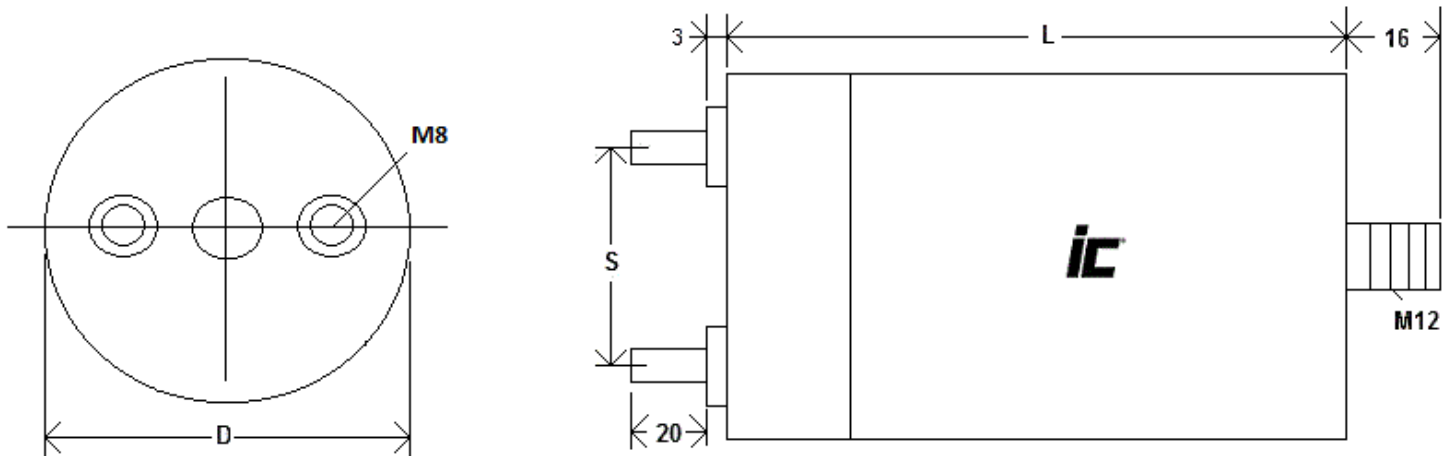
| | | | | | | | | |
|--|---|----------------------------------|-----|-----|--|------|------|--|
| Operating Temperature Range | -40°C to +85°C | | | | | | | |
| Storage Temperature Range | -40°C to +85°C | | | | | | | |
| Capacitance Tolerance | ±10% at 1 kHz, 25°C | | | | | | | |
| Surge Voltage | WVDC | 450 | 700 | 900 | 1100 | 1500 | 2000 | |
| | SVDC | 1.5*WVDC | | | | | | |
| Dissipation Factor Max at 100 Hz, 25°C | .25% | | | | | | | |
| Insulation Resistance @20°C (<70% RH) for 1 minute at 100VDC applied | 10000 Megohmxmicrofarads(seconds) | | | | | | | |
| Dielectric Strength | Terminal to Terminal | | | | Terminal to Case | | | |
| | 150% of VDC applied for 60 Seconds and 25°C | | | | 3 KVAC (50/60 Hz) applied for 60 seconds at 25°C | | | |
| Life expectancy | Up to 100000 hours @70°C | | | | | | | |
| | Capacitance Change | ≤15% of initially measured value | | | | | | |
| Long term Stability | <1% after 2 years at standard environmental conditions | | | | | | | |
| Reliability | 300 FIT | | | | | | | |
| Construction | Metallized polypropylene film and internal series connections | | | | | | | |
| Casing | Metal can with epoxy fill (UL94V-0) | | | | | | | |
| MAXIMUM ALTITUDE | 3500 m | | | | | | | |
| Lead terminations | Lead free tinned Brass leads (RoHS compliant) | | | | | | | |



Terminal style 32



Terminal Style 33



MDCL

Metallized Polypropylene,
Round Tube Capacitor

| WVDC | Capacitance (µF) | IC PART NUMBER | dv/dt (v/µ sec.) | Maximum RMS Ripple Current (A) 100 kHz, +70°C | Typical ESR (mΩ) 100 kHz, +25°C | Self Inductance (nH) | Dims DxL (mm) | Lead Spacing S+-2 (mm) | Thermal Resistance (°C/W) |
|------|------------------|----------------|------------------|---|---------------------------------|----------------------|---------------|------------------------|---------------------------|
| 450 | 200 | 207MDCL450KFC# | 15 | 50 | 4 | 22 | 76x80 | 32 | 8 |
| 450 | 400 | 407MDCL450KFG# | 15 | 60 | 2.5 | 38 | 76x130 | 32 | 8 |
| 450 | 520 | 527MDCL450KHG# | 15 | 65 | 2.4 | 38 | 86x130 | 32 | 8 |
| 450 | 600 | 607MDCL450KFK# | 12 | 60 | 1.9 | 20 | 76x180 | 32 | 8 |
| 450 | 660 | 667MDCL450KKG# | 15 | 70 | 1.7 | 38 | 96x130 | 45 | 8 |
| 450 | 800 | 807MDCL450KHK# | 10 | 70 | 2.9 | 20 | 86x180 | 32 | 8 |
| 450 | 1000 | 108MDCL450KKK# | 10 | 85 | 1.8 | 20 | 96x180 | 45 | 8 |
| 450 | 2000 | 208MDCL450KPN# | 7 | 100 | 0.9 | | 116x230 | 50 | 8 |
| 450 | 2800 | 288MDCL450KTN# | 5 | 120 | 0.9 | | 136x230 | 50 | 8 |
| 700 | 400 | 407MDCL700KFG# | 12 | 50 | 2.8 | 38 | 76x130 | 32 | 8 |
| 700 | 420 | 427MDCL700KFF# | 10 | 35 | 3.2 | 54 | 76x125 | 32 | 8 |
| 700 | 510 | 517MDCL700KFH# | 10 | 35 | 3.5 | 54 | 76x145 | 32 | 8 |
| 700 | 520 | 527MDCL700KHG# | 12 | 65 | 2.7 | 38 | 86x130 | 32 | 8 |
| 700 | 600 | 607MDCL700KFK# | 10 | 60 | 2.2 | 20 | 76x180 | 32 | 8 |
| 700 | 650 | 657MDCL700KHH# | 10 | 60 | 2.5 | 38 | 86x155 | 32 | 8 |
| 700 | 660 | 667MDCL700KKG# | 12 | 70 | 2.1 | 38 | 96x130 | 45 | 8 |
| 700 | 800 | 807MDCL700KHK# | 8 | 70 | 3.2 | 20 | 86x180 | 32 | 8 |
| 700 | 1000 | 108MDCL700KKK# | 8 | 75 | 2.2 | 20 | 96x180 | 45 | 8 |
| 700 | 1000 | 108MDCL700KPG# | 8 | 50 | 1.8 | 38 | 116x130 | 50 | 8 |
| 700 | 1450 | 148MDCL700KPK# | 5 | 80 | 1 | 20 | 116x180 | 50 | 8 |
| 700 | 2000 | 208MDCL700KTK# | 3 | 100 | 0.95 | 20 | 136x180 | 50 | 8 |
| 700 | 2800 | 288MDCL700KTN# | 3 | 100 | 0.8 | | 136x230 | 50 | 8 |
| 900 | 330 | 337MDCL900KFF# | 15 | 35 | 3.2 | 54 | 76x125 | 32 | 8 |
| 900 | 450 | 457MDCL900KHG# | 12 | 55 | 2.7 | 38 | 86x130 | 32 | 8 |
| 900 | 510 | 517MDCL900KHH# | 10 | 55 | 2.5 | 38 | 86x155 | 32 | 8 |
| 900 | 680 | 687MDCL900KHK# | 8 | 70 | 3.2 | 20 | 86x180 | 32 | 8 |
| 900 | 750 | 757MDCL900KPG# | 8 | 65 | 1.8 | 38 | 116x130 | 50 | 8 |
| 900 | 1300 | 138MDCL900KPK# | 5 | 80 | 1 | 20 | 116x180 | 50 | 8 |
| 900 | 1650 | 168MDCL900KTK# | 5 | 90 | 0.95 | 20 | 136x180 | 50 | 8 |
| 900 | 2250 | 228MDCL900KTN# | 5 | 100 | 0.8 | | 136x230 | 50 | 8 |
| 1100 | 125 | 127MDCL112KFC# | 15 | 35 | 4.5 | 22 | 76x80 | 32 | 8 |
| 1100 | 250 | 257MDCL112KFG# | 15 | 60 | 2.8 | 38 | 76x130 | 32 | 8 |
| 1100 | 275 | 277MDCL112KFF# | 12 | 35 | 3.2 | 54 | 76x125 | 32 | 8 |
| 1100 | 300 | 307MDCL112KFH# | 15 | 60 | 3.8 | 38 | 76x150 | 32 | 8 |
| 1100 | 320 | 327MDCL112KFH# | 12 | 35 | 3.6 | 54 | 76x145 | 32 | 8 |
| 1100 | 330 | 337MDCL112KHG# | 15 | 65 | 2.8 | 38 | 86x130 | 32 | 8 |
| 1100 | 350 | 357MDCL112KHF# | 12 | 40 | 3.1 | 54 | 86x125 | 32 | 8 |
| 1100 | 420 | 427MDCL112KHG# | 12 | 60 | 2 | 38 | 86x136 | 32 | 8 |
| 1100 | 420 | 427MDCL112KHH# | 12 | 75 | 1.5 | 38 | 86x155 | 32 | 8 |
| 1100 | 500 | 507MDCL112KKG# | 15 | 70 | 1.6 | 38 | 96x130 | 45 | 8 |
| 1100 | 500 | 507MDCL112KHK# | 10 | 70 | 3.2 | 20 | 86x180 | 32 | 8 |
| 1100 | 550 | 557MDCL112KHK# | 10 | 50 | 3.2 | 54 | 96x145 | 45 | 8 |
| 1100 | 600 | 607MDCL112KHN# | 10 | 65 | 2.5 | | 86x225 | 32 | 8 |
| 1100 | 650 | 657MDCL112KPG# | 10 | 50 | 1.8 | 38 | 116x130 | 50 | 8 |
| 1100 | 750 | 757MDCL112KPH# | 8 | 55 | 1.4 | 38 | 116x150 | 50 | 8 |
| 1100 | 950 | 957MDCL112KTF# | 8 | 50 | 1.8 | 20 | 136x125 | 50 | 8 |
| 1100 | 1200 | 128MDCL112KPN# | 8 | 80 | 1 | | 116x230 | 50 | 8 |
| 1100 | 1300 | 138MDCL112KTK# | 5 | 100 | 0.8 | 20 | 136x180 | 50 | 8 |
| 1100 | 1700 | 178MDCL112KTN# | 5 | 100 | 0.9 | | 136x230 | 50 | 8 |
| 1500 | 180 | 187MDCL152KHG# | 15 | 55 | 2.5 | 38 | 86x130 | 32 | 8 |
| 1500 | 200 | 207MDCL152KFK# | 12 | 55 | 2.7 | 20 | 76x180 | 32 | 8 |
| 1500 | 230 | 237MDCL152KKG# | 12 | 65 | 1.8 | 38 | 96x130 | 45 | 8 |
| 1500 | 260 | 267MDCL152KHK# | 10 | 60 | 3.2 | 20 | 86x180 | 32 | 8 |
| 1500 | 330 | 337MDCL152KKK# | 8 | 70 | 1 | 20 | 96x180 | 45 | 8 |
| 1500 | 350 | 357MDCL152KPF# | 8 | 50 | 0.75 | | 116x125 | 50 | 8 |
| 1500 | 460 | 467MDCL152KPK# | 7 | 75 | 0.8 | | 116x180 | 50 | 8 |
| 1500 | 660 | 667MDCL152KTK# | 6 | 90 | 0.9 | | 136x180 | 50 | 8 |
| 1500 | 900 | 907MDCL152KTN# | 6 | 100 | 0.8 | 20 | 136x230 | 50 | 8 |

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Metallized Polypropylene,
Round Tube Capacitor

| WVDC | Capacitance (µF) | IC PART NUMBER | dv/dt (v/µ sec.) | Maximum RMS Ripple Current (A) 100 kHz, +70°C | Typical ESR (mΩ) 100 kHz, +25°C | Self Inductance (nH) | Dims DxL (mm) | Lead Spacing S+-2 (mm) | Thermal Resistance (°C/W) |
|------|------------------|--------------------------------|------------------|---|---------------------------------|----------------------|---------------|------------------------|---------------------------|
| 2000 | 80 | 806MDCL202KFG# | 20 | 55 | 2.8 | 38 | 76x130 | 32 | 8 |
| 2000 | 100 | 107MDCL202KFH# | 15 | 30 | 3.6 | 54 | 76x145 | 32 | 8 |
| 2000 | 105 | 107MDCL202KHG# | 18 | 60 | 2.8 | 38 | 86x130 | 32 | 8 |
| 2000 | 120 | 127MDCL202KFK# | 15 | 55 | 2.4 | 20 | 76x180 | 32 | 8 |
| 2000 | 130 | 137MDCL202KKG# | 18 | 65 | 2.2 | 38 | 96x130 | 45 | 8 |
| 2000 | 160 | 167MDCL202KHK# | 15 | 65 | 3.5 | 20 | 86x180 | 32 | 8 |
| 2000 | 170 | 177MDCL202KKH# | 12 | 45 | 3.3 | 54 | 96x145 | 45 | 8 |
| 2000 | 200 | 207MDCL202KHN# | 12 | 65 | 2.5 | | 86x225 | 32 | 8 |
| 2000 | 205 | 207MDCL202KKK# | 12 | 75 | 2.4 | 20 | 96x180 | 45 | 8 |
| 2000 | 380 | 387MDCL202KPN# | 10 | 80 | 1.3 | | 116x230 | 50 | 8 |
| 2000 | 400 | 407MDCL202KTK# | 7 | 100 | 1 | 20 | 136x180 | 50 | 8 |
| 2000 | 550 | 557MDCL202KTN# | 7 | 100 | 0.95 | | 136x230 | 50 | 8 |