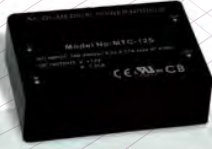


15 Watt

eMTC Series



- ◆ Power Module for PCB Mountable
- ◆ Universal Input: 90-264 VAC, 47-440 Hz
- ◆ Regulated Output and Low Ripple and Noise
- ◆ -40°C Starting Optional (MTC-E 1)
- ◆ Isolation Class 11
- ◆ UL60601-1 / IEC60601-1 / EN60601-1 Medical Safety Approvals
- ◆ 3-Year Warranty

| Input Specifications | |
|---|--|
| Voltage Range | 90 ~ 264 VAC or 120~370 VDC |
| Frequency | 47~440Hz |
| Output Specifications | |
| Output Power | 15 Watt (max.) |
| Voltage Accuracy (Full Load and Nominal Vin) | Single, Dual: $\pm 2\%$ Triple: $\pm 3\%$ / $\pm 5\%$ |
| Minimum Load | 0% to 25% (at Full Load) |
| Line Regulation (LL to HL at Full Load) | Single, Dual: $\pm 2\%$ (typ.) Triple: $\pm 3\%$ / $\pm 5\%$ (typ.) |
| Load Regulation (Dual: 10% to 100% at Full Load) (Triple: 10% to 100% at Full Load) | Single: $\pm 1\%$ (0% to 100% at Full Load) (typ.) Dual: $\pm 1\%$ (Symmetric Load) (typ.) Triple: $\pm 1\%$ / $\pm 5\%$ (Symmetric Load) (typ.) |
| Ripple & Noise | 1% Vout (20MHz bandwidth) (max.) |
| Temperature Coefficient | $\pm 0.01\%$ / °C |
| Short Circuit Protection | Hiccup mode, indefinite (Automatic recovery) |
| General Specifications | |
| Efficiency (see table list) | 75% to 83% (typ.) |
| Isolation Voltage | 4000 VAC (min.) |
| Isolation Resistance | $10^8 \Omega$ (Input to Output) (min.) |
| Operating Temperature | -25°C to +70°C (MTC-E1) -40°C to +70°C (MTC-E1) (Case Temperature max. +95°C) |
| Storage Temperature | 40°C to +85°C |
| Humidity | 95% RH (max.) |
| Cooling | Free-air Convection |
| Physical Specifications | |
| Dimension (Tolerance ± 0.5 mm) | 64.1 x 45.6 x 23.5 mm 2.52 x 1.8 x 0.93 inches |
| Weight | 120g |
| Case Material | Plastic resin (flammability to UL 94V-0) |

Model

►► eMTC Single Output

| Model & Ordering No | Input Voltage (V.AC) | Output Voltage (V.DC) | Output Current (m.A) max. | Eff (%) |
|---------------------|----------------------|-----------------------|---------------------------|---------|
| eMTC-3.3S | 90~264 | 3.3 | 3000 | 75 |
| eMTC-5S | 90~264 | 5 | 3000 | 79 |
| eMTC-7.35S | 90~264 | 7.35 | 2040 | 79 |
| eMTC-9S | 90~264 | 9 | 1666 | 80 |
| eMTC-12S | 90~264 | 12 | 1250 | 81 |
| eMTC-15S | 90~264 | 15 | 1000 | 82 |
| eMTC-24S | 90~264 | 24 | 625 | 83 |

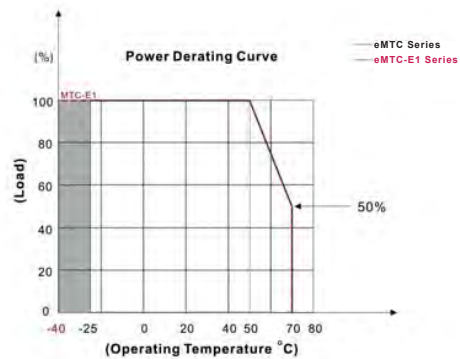
►► eMTC Dual Output

| Model & Ordering No | Input Voltage (V.AC) | Output Voltage (V.DC) | Output Current (m.A) max. | Eff (%) |
|---------------------|----------------------|-----------------------|---------------------------|---------|
| eMTC-5D | 90~264 | ± 5 | ± 1500 | 79 |
| eMTC-12D | 90~264 | ± 12 | ± 625 | 82 |
| eMTC-15D | 90~264 | ± 15 | ± 500 | 82 |

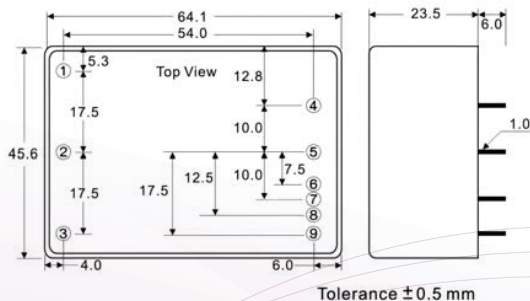
►► eMTC Triple Output

| Model & Ordering No | Input Voltage (V.AC) | Output Voltage (V.DC) | Output Current (m.A) max. | Eff (%) |
|---------------------|----------------------|-----------------------|---------------------------|---------|
| eMTC-5S12D | 90~264 | 5 / ± 12 | 2000 / ± 200 | 78 |
| eMTC-5S15D | 90~264 | 5 / ± 15 | 2000 / ± 150 | 78 |

Derating



Outline Dimensions & Pin Connections



| Pin # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--------|--------|-----------|-----------|---------|--------|---------|---------|--------|---------|
| Single | NO PIN | AC IN (L) | ACIN(N) | -DC OUT | NOPIN | NOPIN | +DC OUT | NOPIN | NOPIN |
| Dual | NO PIN | AC IN (L) | ACIN(N) | -DC OUT | COMMON | NO PIN | +DC OUT | NO PIN | NOPIN |
| Triple | NO PIN | AC IN (L) | AC IN (N) | +5V RTN | +5VOUT | -DC OUT | NOPIN | COMMON | +DC OUT |