

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 ( MSC-E1)
- ◆ 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	40 Watt (max.)
Voltage Accuracy (Full Load and Nominal Vin)	Single, Dual: ±2% 5S12S,5S24S, Triple: ±3% / ±5%
Minimum Load	0% to 25% (at Full Load)
Line Regulation (LL to HL at Full Load)	Single, Dual: ±2% (typ.) 5S12S,5S24S, Triple: ±0.5% / ±5% (typ.)
Load Regulation (Dual:10% to 100% at Full Load) (Triple:10% to 100% at Full Load)	Single: ± 1% (0% to 100% at Full Load) (typ.) Dual: ± 1% (Symmetric Load) (typ.) 5S12S,5S24S: ±2% / ±6% (Symmetric Load)(typ.) Triple: ± 3% / ±7% (Symmetric Load) (typ.)
Ripple & Noise (20MHz bandwidth)	3.3.S: 50mV (Vp-p) (max.) others: 1 %Vout (Vp-p) (max.)
Temperature Coefficient	± 0.01 % / °C
Short Circuit Protection	Hiccup mode, indefinite (Automatic recovery)
General Specifications	
Efficiency (see table list)	74% to 83% (typ.)
Isolation Voltage	4000 VAC (min.)
Isolation Resistance	10 <sup>8</sup> Ω (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	89.0 x 63.5 x 27.0 mm (Tolerance ±0.5 mm)
Weight	280g
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

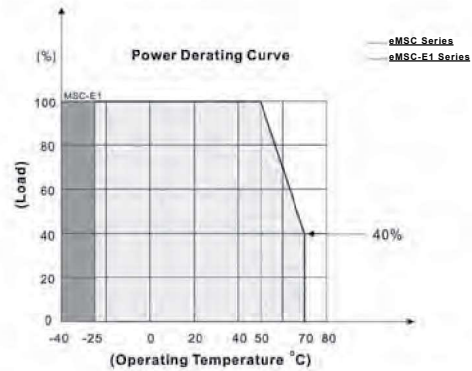
#### ► eMTC Dual Output

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

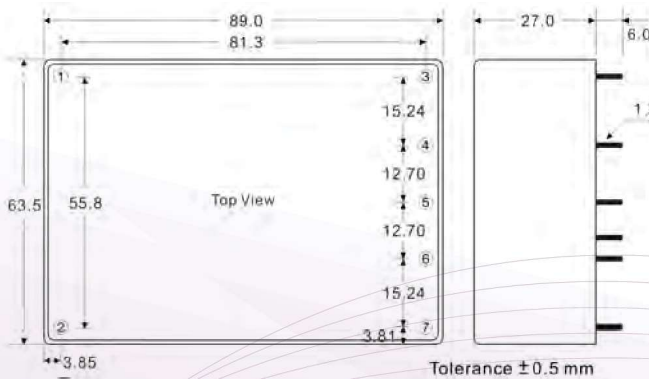
#### ► eMTC Triple Output

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 #

Pin #	1	2	3	4	5	6	7
Single	AC IN (N)	AC IN (L)	+DC OUT	NO PIN	-DC OUT	NO PIN	NO CONNECT
Dual	AC IN (N)	AC IN (L)	+DC OUT	NO PIN	COMMON	NO PIN	-DC OUT
5S12S 5S24S	AC IN (N)	AC IN (L)	+12V/24V OUT	+5V OUT	+12V RTN	+5V RTN	NO PIN
Triple	AC IN (N)	AC IN (L)	+DC OUT	+5V OUT	COMMON	+5V RTN	-DC OUT