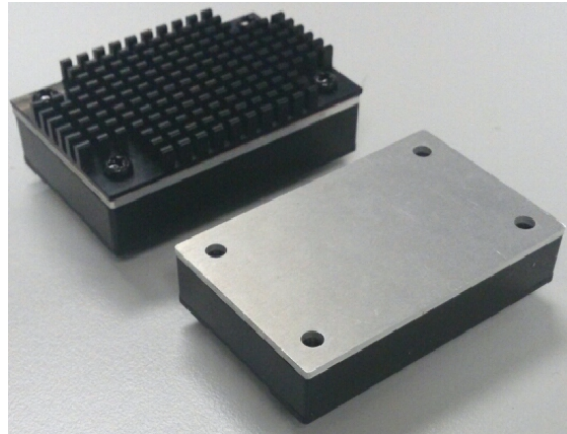


## ERM50 Series

### 50 Watts

**Total Power:** 50 Watts  
**Input Voltage:** 72 or 110 V  
**# of Outputs:** Single

**Preliminary**



### Special Features

- Small 57.9 x 36.8 x 12.7 mm package
- Input Ranges 55 - 100 Vdc or 66-160 Vdc
- High Efficiency up to 92%
- No Minimum Load Requirement
- Operating Temp. Range -40 °C to +85 °C
- Reinforced Insulation 3000 VACrms
- Under-Voltage Shutdown
- Remote On/Off
- Plastic Baseplate with Metal Case
- Vibration and Thermal Shock to EN61373
- Safety meets EN60950-1 and Railway Standard EN50155

### Safety

- cUL/UL 60950-1
- IEC/EN 60950-1
- IEC/EN 50155

## Electrical Specifications

Input	
Input range:	55 - 100 Vdc; 66 - 160 Vdc
Efficiency:	92% @ 12 Vo
Output	
Voltage tolerance:	±1.0%
Line regulation:	±0.2%
Load regulation:	±0.3%
Noise/ripple:	All models: 100 mV
Overload protection:	150% typ of Io max, hiccup
Short circuit protection:	Hiccup mode
Switching frequency:	320 KHz
Isolation	
I/O isolation:	Reinforced Insulation, 3000Vac rms; I/Case. O/Case: 1500 Vdc
Insulation resistance:	1000Mohm
Insulation capacitance:	3000pF

## Environmental Specifications

Operating ambient temperature range:	-40 °C to +85 °C
Storage temperature:	-55 °C to +125 °C
Humidity:	5% to 95% non-condensing
MTBF:	472Khrs calculated

## Ordering Information

Input Voltage	Output	Efficiency @ Max Load	Max Power	Model Number
55 - 100 V	5V@10 A	90%	50 W	ERM50-72S05
55 - 100 V	12V@4.17 A	92%	50 W	ERM50-72S12
55 - 100 V	15V@3.33 A	92%	50 W	ERM50-72S15
55 - 100 V	24V@2.08A	91%	50 W	ERM50-72S24
66 - 160 V	5V@10 A	90%	50 W	ERM50-110S05
66 - 160 V	12V@4.17 A	91%	50 W	ERM50-110S12
66 - 160 V	15V@3.33 A	92%	50 W	ERM50-110S15
66 - 160 V	24V@2.08 A	91%	50 W	ERM50-110S24

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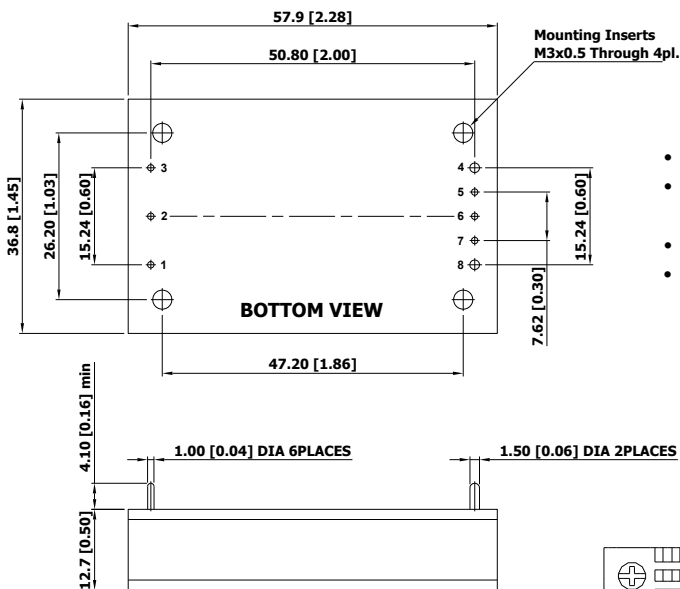
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- Surge Protection

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## Mechanical Dimensions



- All dimensions in mm (inches)
- Tolerance: X.X±0.5 (X.XX±0.02)  
X.XX±0.25 (X.XXX±0.01)
- Pin diameter  $\hat{U}$  1.0 ±0.05 (0.04±0.002)
- Pin diameter  $\hat{U}$  1.5 ±0.05 (0.06±0.002)

## Pin Connections

Pin	Function
1	+Vin
2	Remote On/Off
3	-Vin
4	-Vout
5	-Sense <sub>(8)</sub>
6	Trim
7	+Sense <sub>(8)</sub>
8	+Vout

## Heatsink Option

