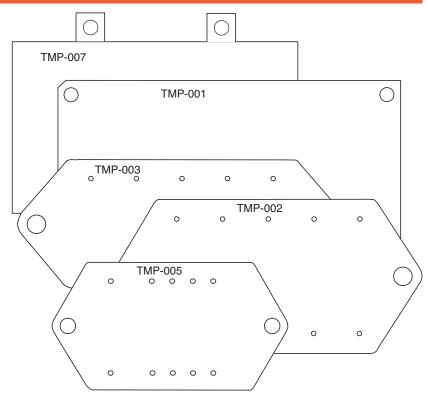
# **TMP Thermal Pad Accessory**

#### **FEATURES**

- -60° to +180°C temperature rating
- Provides thermal transfer for Interpoint converters
- 0.2°C in<sup>2</sup>/W (129°C mm<sup>2</sup>/W) thermal resistance
- · 4000 Vac breakdown voltage typical

MODEL NUMBER	CONVERTER SERIES
TMP-001	MFL, MFLHP, MHP, MOR
TMP-002	MWR, MTR Triple, MHV Triple, MTO, MTW, MRH, MHL, HR300
TMP-003	MTR Single and Dual, MHV Single and Dual, MHD, MHE, MLP
TMP-005	MPE, MHF+
TMP-007	MOR



For details, refer to Figures 1 through 5 on the following page.

### **DESCRIPTION**

Our accessory Thermal Mounting Pads (TMP) provide a simple and effective method of ensuring a low thermal resistance path between a DC/DC converter and its mounting plane. When placed between the converter and circuit board or heat sink, it will provide electrical isolation, fill small surface irregularities, and produce a 0.20° C in²/W (129°C mm²/W) thermal resistance path.

#### **MATERIAL**

The Thermal Mounting Pads, made of silicon rubber and fiber-glass, are thermally stable and non-flammable. They are non-toxic, do not require grease and do not exhibit the cracking problems of ceramic materials. The pads may temporarily react to some cleaning agents (notably chlorinated hydrocarbons) by swelling, but are not damaged after the solvent is removed. They will tolerate soldering process temperatures.

## **MOUNTING**

For maximum thermal conduction from the converter through the thermal pad to the thermal plane, a mounting pressure of 300-600 lbs/in<sup>2</sup> is recommended. To achieve this level of mounting pressure, we recommend using our flanged models. The formula to calculate the recommended pressure is P=(T\*N)/(0.2\*D\*A); where P=pressure in PSI, T=torque, N=number of fasteners, D=fastener diameter (in inches), A=contact surface area (in square inches).



# **TMP Thermal Pad Accessory**

TMP-001
3.020 x 1.520 inches, nominal
(76.71 x 38.61 mm)
MFL, MFLHP, MHP, MOR Series Converters
Case U

O O O O

TMP-002

2.720 x 1.366 inches nominal
(69.09 x 34.70 mm)
MTR Triple, MHV Triple,
MTO, MTW, MRH, MHL, MWR
and HR300 Series Converters
All J cases, see Section B8
O O O

FIGURE 1: TMP-001

FIGURE 2: TMP-002

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TMP-007
2.665 x 2.020 inches nominal
(67.69 x 51.31 mm)
MOR Series Converters,
FME Series Filters
Cases W, Y & Z

O O O O O O O TMP-003

2.860 x 1.144 inches nominal (72.64 x 29.06 mm)

MTR Single and Dual, MHV Single and Dual, MHD, MHE, and MLP Series Converters
All K cases, see Section B8

**FIGURE 3: TMP-007** 

**FIGURE 4: TMP-003** 

CHARACTERISTIC	TYPICAL VALUE
	Unless otherwise noted
Color	Green
Thermal Resistance, °C in <sup>2</sup> /W	0.20 (129°C mm <sup>2</sup> /W)
Dielectric Constant	4.00
Continuous Use Temperature °C	-60 to +180 <sup>1</sup>
Thermal Conductivity (W/meter - °K)	2.00
Thickness	0.010 ±0.001 inches (0.25 ±0.025 mm)
Breakdown Voltage (per ASTM D149)	4000 min. Vac (400 Vac per mil)

TMP-005

2.000 x 1.130 inches nominal
(50.80 x 28.70 mm)

MHF+ and MPE Series Converters
All G cases, see Section B8

FIGURE 5: TMP-005

#### Notes:

1. Converter or filter being used with thermal pad must not exceed its maximum case temperature.

