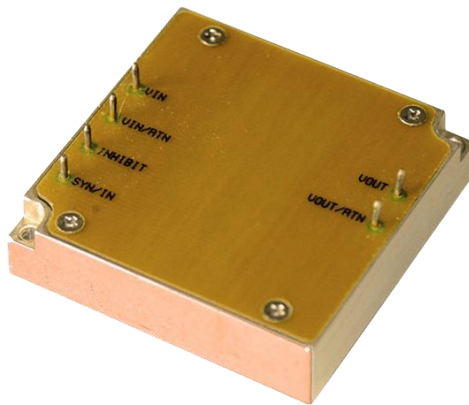


## M7119 SERIES

DC/DC POWER SUPPLY



### PRODUCT HIGHLIGHTS

- MINIATURE
- HIGH DENSITY
- SINGLE OUTPUT
- DC/DC CONVERTER
- UP TO 50W

### **Applications**

Military, Ruggedized, Telecom, Industrial

### **Special Features**

- Extremely Miniature size
- High efficiency
- Wide input range
- Up to 26 W/IN<sup>3</sup>
- Input / Output isolation
- Fixed switching frequency (250 kHz)
- External synchronization capability
- TTL logic enable
- EMI/RFI filters included
- Indefinite short circuit protection with auto-recovery
- Over-voltage shutdown with auto-recovery
- Over temperature shutdown with auto-recovery

### **Environmental Conditions**

Meets or exceeds MIL-STD-810D

Temperature:

Operating  $-55^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$   
(baseplate) Storage  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

### **Reliability**

150,000 hours, calculated per MIL-STD-217F at  $+85^{\circ}\text{C}$  baseplate, ground fixed.

### **Electrical Specifications**

#### **DC INPUT**

DC Input range: 18 to 48 VDC Input transient protection: All models meet or exceed (no damage) MIL-STD-1275A (100V for 50 mSec) and MIL-STD-704A, MIL-STD-704D (80V for 0.1 Sec)

Efficiency: Up to 82%

Designed to meet\* MIL-STD-461F: CE101, CE102, CS101, CS114, CS115, CS116, RE101, RE102, RS101, RS103

Isolation:

200V between Input and Output  
200V between Input and Case

#### **DC OUTPUT (floating)**

Line/Load regulation:

Less than 1% (no load to full load,  $-55^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ )

Ripple and Noise: 50mVp-p, typical (max. 1%)

Current limiting (Hiccup):

Continuous protection for unlimited time

Over voltage protection:

Electronic shutdown with automatic recovery and a passive transorb on output.

Over temperature protection:

Shutdown at baseplate temperature of  $+105^{\circ}\text{C}$  ( $\pm 5^{\circ}\text{C}$ )

Automatic recovery at baseplate temperature lower than  $+95^{\circ}\text{C}$  ( $\pm 5^{\circ}\text{C}$ )

Isolation:

200V between Output and Input 100V between Output and Case

\* EMC compliance achieved when tested with 5  $\mu\text{H}$  LISNs, shielded harness and static resistive load.

**M7119 SERIES DC/DC POWER SUPPLY**

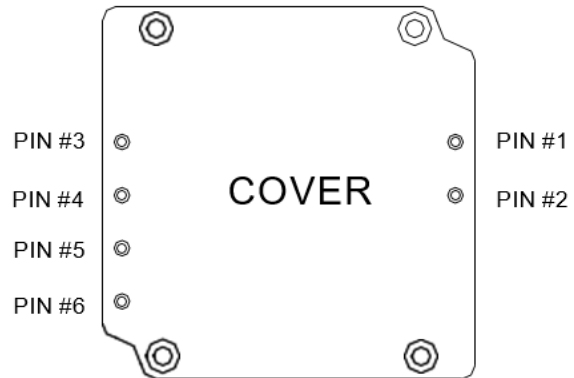
**SELECTION GUIDE**

Model	Total Power	Input	Output
M7119-100	40W	18 to 48 VDC	5V @ 8A
M7119-101	36W	18 to 48 VDC	12V @ 3A
M7119-102	37.5W	18 to 48 VDC	15V @ 2.5A
M7119-103	48W	18 to 48 VDC	24V @ 2A
M7119-104	39.2W	18 to 48 VDC	28V @ 1.4A
M7119-105	38.4W	18 to 48 VDC	28V @ 1.4A

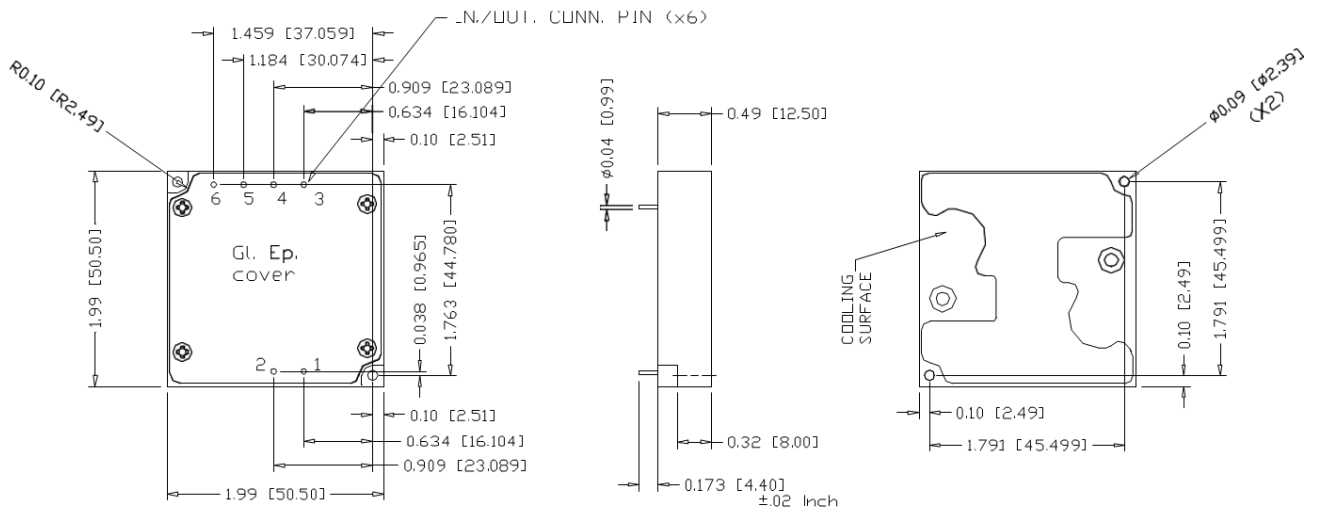
Note: other voltages and currents are available, consult factory.

**PIN ASSIGNMENT**

PIN No.	PIN Function
1	VOUT
2	VOUT RTN
3	VIN
4	VIN RTN
5	INHIBIT
6	SYN IN



**M7119 SERIES DC/DC POWER SUPPLY**



**Notes**

1. Dimensions are in Inches [mm]
2. Tolerance is:  
.XX ±0.015 IN  
.XXX ±0.007 IN
3. Weight: 1.98 oz (56 g.)

\* Specifications are subject to change without prior notice by the manufacturer