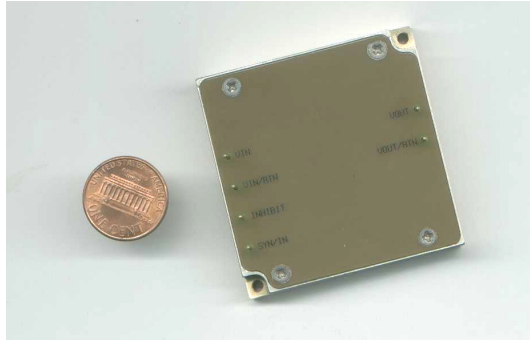


# M7119 SERIES

THE MOST COMPLETE  
MINIATURE, HIGH DENSITY,  
SINGLE OUTPUT,  
DC/DC CONVERTERS  
(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

Meets or exceeds MIL-STD-810D

Temperature:

Operating -55°C to +85°C (baseplate)

Storage -55°C to +125°C

## RELIABILITY

150,000 hours, calculated per  
MIL-STD-217F at +85°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%

EMI/RFI:

All models meet or exceed MIL-STD-461C

CE03, CE07, CS01, CS02, CS06, RE02, RS02, RS03

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°C to +85°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 transistor on output.

Over temperature protection:

Shutdown at baseplate temperature of +105°C (±5°C)

Automatic recovery at baseplate temperature

lower than +95°C (±5°C)

Isolation:

200V between Output and Input

100V between Output and Case

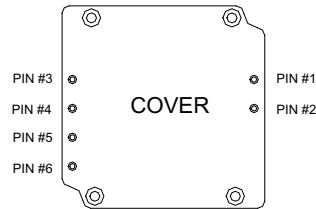
## SELECTION GUIDE

Model	Input	Output	Minimum Load	Maximum Load	Regulation	Ripple (20 MHz BW)
M7119-1	18 to 48 VDC	5 VDC	0 A	8 A	± 1%	50 mVp-p
M7119-2	18 to 48 VDC	12 VDC	0 A	3.5 A	± 1%	50 mVp-p
M7119-3	18 to 48 VDC	15 VDC	0 A	3 A	± 1%	50 mVp-p
M7119-4	18 to 48 VDC	5.6 VDC	0 A	8 A	± 1%	50 mVp-p
M7119-5	18 to 48 VDC	5 VDC	0 A	4 A	± 1%	50 mVp-p
M7119-6	18 to 38 VDC	12 VDC	0 A	1.5 A	± 1%	50 mVp-p
M7119-7	18 to 38 VDC	5 VDC	0 A	0.5 A	± 1%	50 mVp-p
M7119-12	16 to 36 VDC	5 VDC	0 A	8 A	± 1%	50 mVp-p
M7119-13	18 to 36 VDC	5 VDC	0 A	8 A	± 1%	50 mVp-p

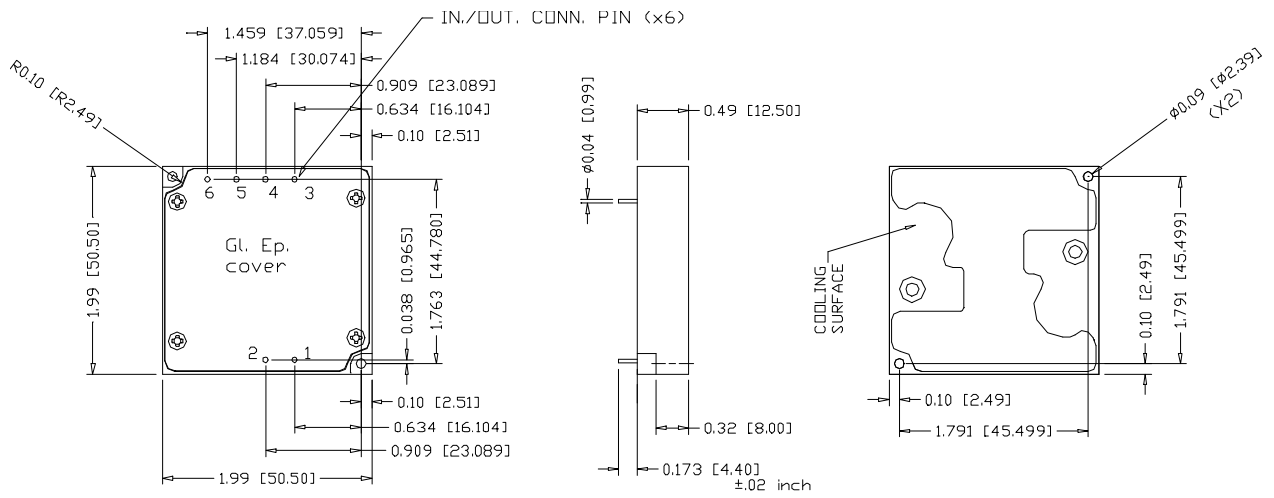
Note: other voltages and currents are available, consult factory.

## PIN ASSIGNMENT

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



## OUTLINE DRAWING



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

### Notes

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