

M647 SERIES

DC/DC POWER SUPPLY



PRODUCT HIGHLIGHTS

- MINIATURE
- HIGH DENSITY
- TRIPLE OUTPUT
- DC/DC POWER SUPPLY
- UP TO 200 W



APPLICATIONS

Military, Ruggedized, Telecom, Industrial

SPECIAL FEATURES

- Miniature size
- High efficiency
- Wide input range
- Input / Output isolation
- Fixed switching frequency (250 KHz)
- EMI/RFI filters included
- Indefinite short circuit protection with auto-recovery
- Input over-voltage shutdown with auto-recovery
- Over temperature shutdown with auto-recovery

ENVIRONMENTAL

Meets or exceeds MIL-STD-810D

Temperature:

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

Storage -55°C to $+125^{\circ}\text{C}$

RELIABILITY

150,000 hours, calculated per

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

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

ELECTRICAL SPECIFICATIONS

DC INPUT

DC Input range: 18 to 36 VDC

Input transient protection:

All models meet or exceed (no damage)

MIL-STD-1275 (100V for 50 mSec) &

MIL-STD-704A, MIL-STD-704D (80V for 0.1 Sec)

Over-voltage shutdown with auto-recovery

Efficiency: 75%, Typical (up to 85%)

EMI/RFI:

Designed to meet MIL-STD-461C - CS01, CS02, CE03, RS02 & RS03, MIL-STD-461D - CE102-16

Isolation:

100V between Input and Outputs

100V between Input and Case

DC OUTPUT (floating)

Line/Load regulation:

Less than 2% (no load to full load, -55°C to $+85^{\circ}\text{C}$)

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

Current limiting (Foldback):

Continuous protection for unlimited time

Over voltage protection:

Passive tranzorb on output.

Over temperature protection:

Automatic Thermal Shutdown with

Automatic recovery for each output.

Isolation:

100V between Outputs and Input

100V between Output and Case

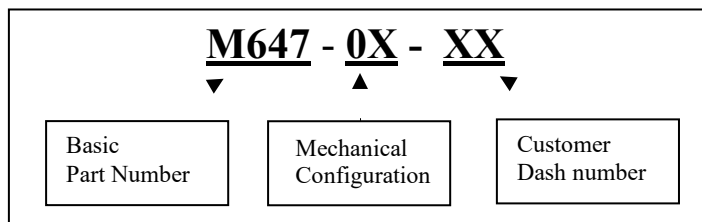
PIN ASSIGNMENT

PIN No.	PIN Function
1	VIN +
2	VIN -
3	ROUT 1
4	OUT 1 +

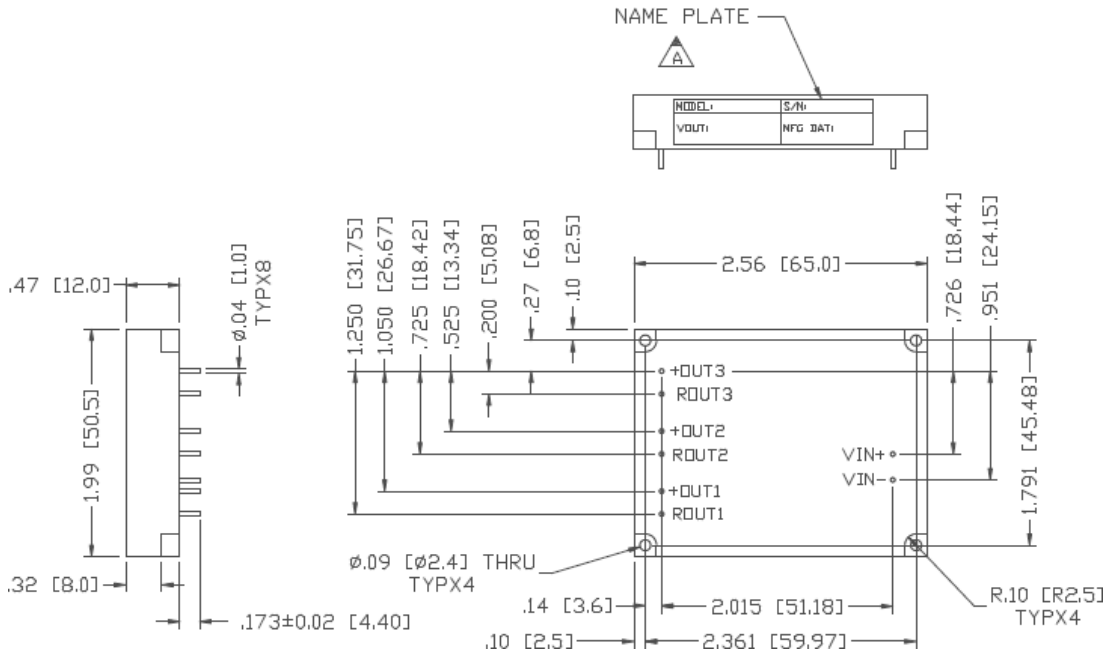
PIN No.	PIN Function
5	ROUT 2
6	OUT 2 +
7	ROUT 3
8	OUT 3 +

Milpower Source can customize this product to your requirements - contact us!

PART NUMBERING



OUTLINE DRAWING - Option 1 – Baseplate cooling – (M647-01-XX)



OUTLINE DRAWING - Option 2 – Cooling corners (M647-02 - XX)

