

M716 SERIES

THE MOST COMPLETE
MINIATURE, HIGH DENSITY,
SINGLE OUTPUT,
DC/DC CONVERTERS
(UP TO 50W)

APPLICATIONS

Military, Ruggedized, Telecom, Industrial

SPECIAL FEATURES

- Miniature size
- High efficiency
- Wide input range
- Up to 15 W/IN³
- Input / Output isolation
- Fixed switching frequency (250 KHz)
- 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:

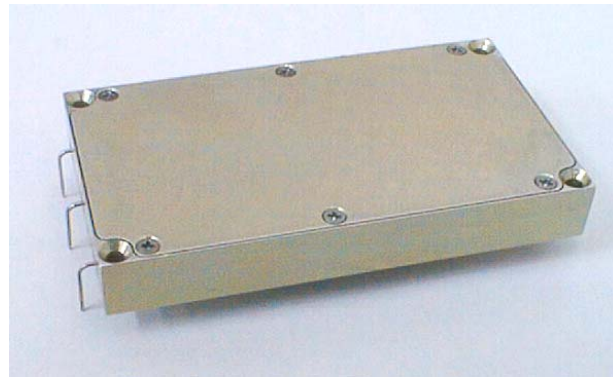
Operating -55°C to +85°C (baseplate)

Storage -55°C to +125°C

RELIABILITY

150,000 hours, calculated per
MIL-STD-217F at +85°C baseplate,
ground fixed.

**MPS can customize this product
to your requirements –
contact us!**



ELECTRICAL SPECIFICATIONS

DC INPUT

DC Input range: 9 to 36 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:

Meets or exceeds MIL-STD-461D

CE101, CE102, CS101, RE101, RE102

Isolation:

500V between Input and Output

500V between Input and Case

DC OUTPUT (floating)

Line/Load regulation:

Less than 2% (no load to full load, -55°C to +85°C)

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

Current limiting (HickUp):

Continuous protection for unlimited time

Over voltage protection:

Electronic shutdown with automatic recovery and

a passive tranzorb on output.

Over temperature protection:

Shutdown at baseplate temperature of +95°C (±5°C)

Automatic recovery at baseplate temperature

lower than +90°C (±5°C)

Isolation:

500V between Output and Input

100V between Output and Case

SELECTION GUIDE

Model	Input	Output	Minimum Load	Maximum Load	Regulation	Ripple (20 MHz BW)
M716-1	18 to 36 VDC	5 VDC	0 A	8 A	± 2%	50 mVp-p
M716-2	18 to 36 VDC	12 VDC	0 A	3 A	± 2%	50 mVp-p
M716-3	18 to 36 VDC	15 VDC	0 A	3.5 A	± 2%	50 mVp-p
M716-10	9 to 36 VDC	5 VDC	0 A	8 A	± 2%	50 mVp-p
M716-11	9 to 36 VDC	12 VDC	0 A	4 A	± 2%	50 mVp-p
M716-12	9 to 36 VDC	28 VDC	0 A	2 A	± 2%	50 mVp-p

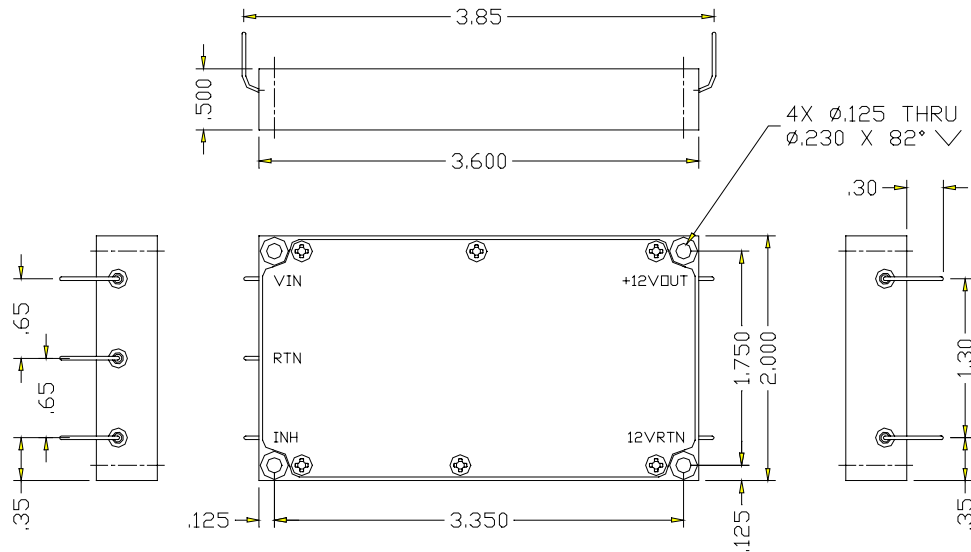
Note: other voltages and currents are available, consult factory.

PIN ASSIGNMENT

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

MPS can customize this product to your requirements - contact us!

OUTLINE DRAWING



Notes

1. Dimensions are in Inches
2. Tolerance is:
XX ±.01 IN
XXX ±.005 IN
3. Weight: Approx. 3.5 Oz (100 gr.)

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