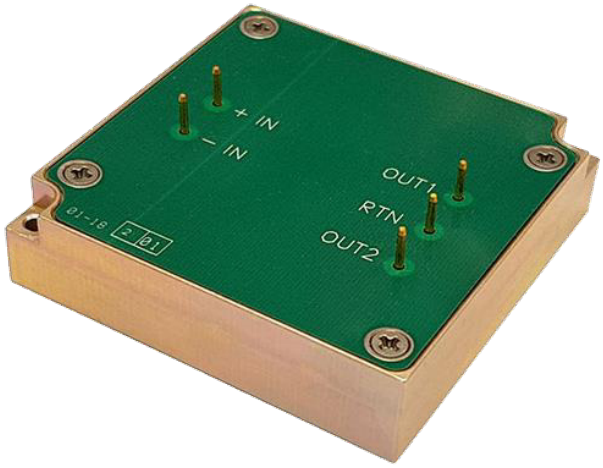
M786 SERIES

DC/DC POWER SUPPLY



PRODUCT HIGHLIGHTS

- MINIATURE
- HIGH DENSITY
- SINGLE/DUAL OUTPUT
- DC/DC POWER SUPPLY
- UP TO 30 W

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Amphenol
MILITARY HIGH SPEED

M786 SERIES DC/DC POWER SUPPLY

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 (optional)
- 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
273,000 hours, calculated per MIL-STD-217F at +85°C baseplate, AUF.

1,200,000 hours, calculated per MIL-STD-217F at +85°C baseplate, GF.

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

ELECTRICAL SPECIFICATIONS

DC INPUT
DC input range: 16 to 36 VDC

Input transient protection:
All models meet or exceed (no damage)
MIL-STD-1275A (100V for 50mSec) and
MIL-STD-704A, MIL-STD-704D (80V for 0.1Sec)
(for 600V Spike – a serial resistor is required)

Overvoltage shutdown with auto-recovery (optional)

Efficiency: 75%, Typical

EMI/RFI:
Design to meet or exceed
MIL-STD-461C - CS01, CS02, CE03, RS02 & RS03, MIL-STD-461D - CE102-16

Isolation:
200V between Input and Output
200V 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:
Continuous protection for unlimited time.

Over voltage protection:
Passive transzorb on output.

Over temperature protection:
Shutdown at baseplate temperature of +100°C (±5°C)
Automatic recovery at baseplate
temperature lower than +90°C (±5°C)

Isolation:
200V between Output and Input
200V between Output and Case

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M786 SERIES DC/DC POWER SUPPLY

SELECTION GUIDE

Model	Input	Output #1	Output #2
M786-16	16 to 36VDC	5V / 2A	3.3V / 1A
M786-17	16 to 36VDC	5V / 2A	3.3V / 2A
M786-18	18 to 36VDC	5V / 1A	3.3V / 2A
M786-19	16 to 45VDC	5V / 2A	3.3V / 3A
M786-20	18 to 36VDC	15V / 1.6A	15V / 0.4A

PIN ASSIGNMENT

Option 1

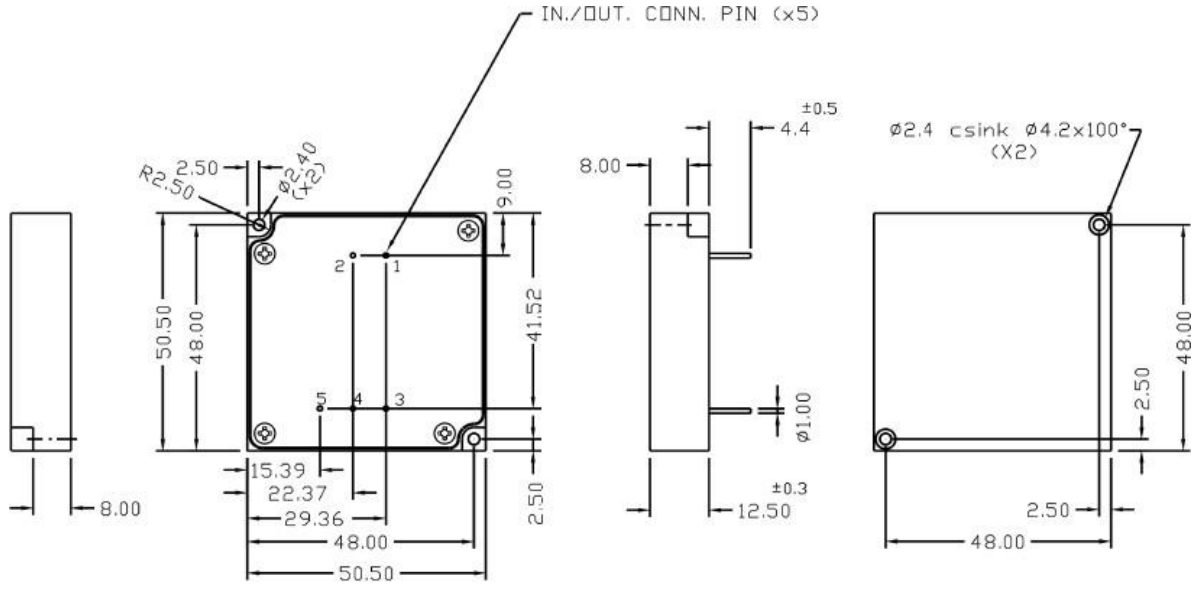
Pin No.	Pin Function
1	+ VIN
2	- VIN
3	+ OUT1 1
4	RTN
5	+ OUT 2

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

Option 2

Pin No.	Pin Function
1	+ VIN
2	- VIN
3	+ OUT 1
4	RTN
5	- OUT 2

OUTLINE DRAWING



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

Notes

1. Dimensions are in mm
2. Tolerance is:
   .XX ±.02 IN
   .XXX ±.01 IN
3. Weight: Approx. 2 Oz (60 gr.)

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