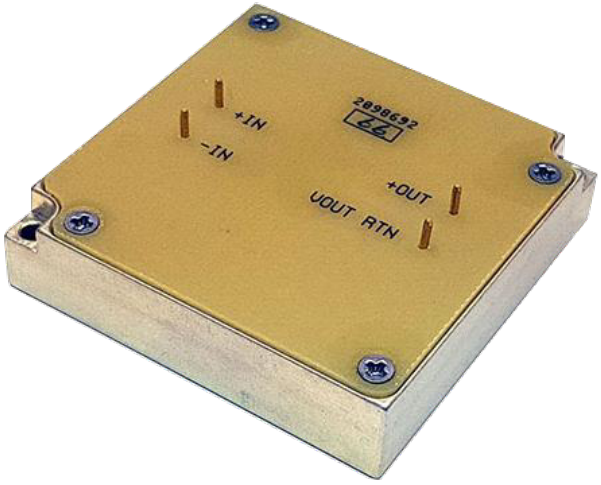
M785 SERIES

DC/DC POWER SUPPLY



PRODUCT HIGHLIGHTS

- MINIATURE
- HIGH DENSITY
- SINGLE OUTPUT
- DC/DC POWER SUPPLY
- UP TO 25 W

John Tucci • Phone: (607) 563-5388 • Email: jtucci@amphenol-aao.com
• www.amphenol-aerospace.com

Amphenol
MILITARY HIGH SPEED

M785 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: 18 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)
(for 600V Spike – a serial resistor is required)

Over-voltage shutdown with auto-recovery (optional)

Efficiency: 75%, Typical

EMI/RFI:
Designed to meet 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 tranzorb 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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SELECTION GUIDE

Model	Input	Output
M785-1	18 to 36 VDC	5.0V / 1.0A
M785-7	18 to 36 VDC	16.5V / 0.5A
M785-8-2	13.5 to 22 VDC	2.1V / 4.5A
M785-9	13.5 to 22 VDC	5.1V / 2.7A
M785-10	13.5 to 22 VDC	15V / 1.5A
M785-11	18 to 36 VDC	5.0V / 2.0A

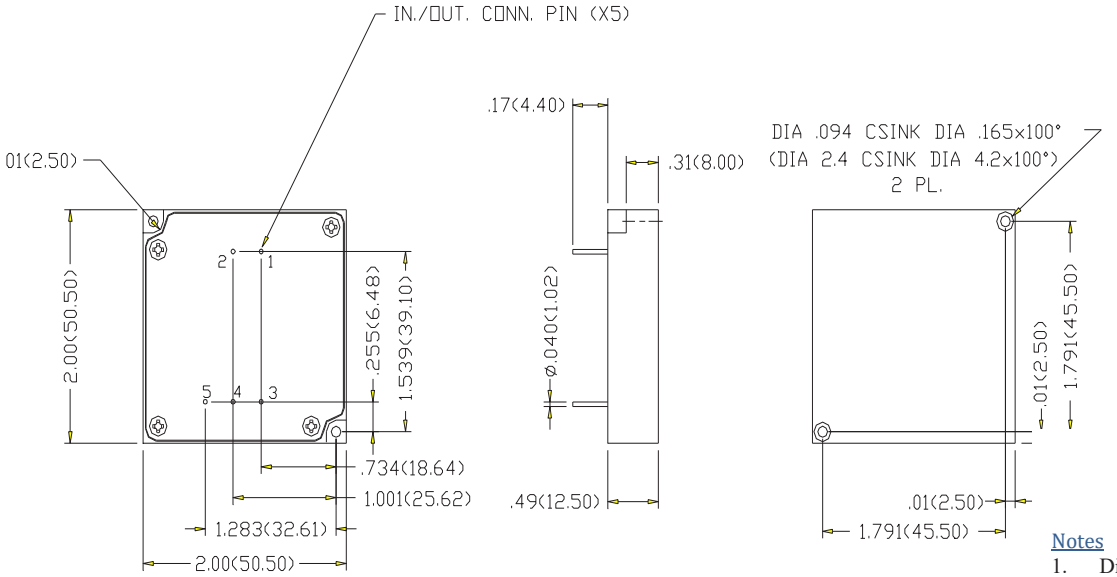
Note: other voltages and currents are available, consult factory.

PIN ASSIGNMENT

PIN No.	PIN Function
1	+ VIN
2	- VIN
3	+ OUT
4	RTN
5	N.C.

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

OUTLINE DRAWING



Notes

1. Dimensions are in Inches [mm]
2. Tolerance is:
   .XX ±.02 IN
   .XXX ±.01 IN
3. Weight: Approx. 1.8 Oz (51 gr.)

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