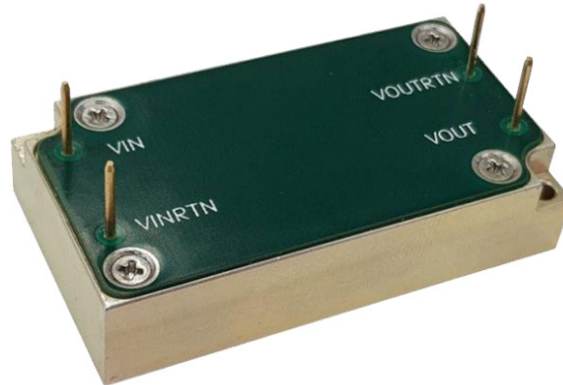


M7117 SERIES

DC/DC POWER SUPPLY



DESCRIPTION

The M7117 PCB mounted military power supply is a rugged single output DC to DC converter which accepts an 18 - 48VDC input voltage range and provides a single DC output from 2 to 28VDC at up to 15W. Custom outputs available upon request and the unit is Designed to meet military standards, MIL-STD-704, MIL-STD-1275, MIL-STD-810, MIL-STD-461.

FEATURES

- Extremely Miniature size
- High power density: up to 12.2 W/in³
- High efficiency
- Input / Output isolation
- Fixed switching frequency (250 kHz)
- EMI filters included
- Non-latching protections:
 - o Input under/overvoltage lockout
 - o Overload/short-circuit protection
 - o Output overvoltage protection
 - o Over temperature shutdown

HOW TO ORDER

Part Number	Input Volatage Range	Output Voltage	Output Current
CF-02EM7117-1	18 to 48VDC	5VDC	3A
CF-02EM7117-2	18 to 48VDC	12VDC	1.25A
CF-02EM7117-3	18 to 48VDC	15VDC	1A
CF-02EM7117-4	18 to 48VDC	24VDC	0.6A

ELECTRICAL SPECIFICATIONS:

DC INPUT		
Normal voltage range: 18 to 48 VDC	Efficiency: Up to 82%	Isolation: Input to Output: 200 VDC Input to Case: 200 VDC
EMC: Designed to meet* MIL-STD-461F: CE101, CE102, CS101, CS114, CS115, CS116, RE101, RE102, RS101, RS103	Abnormal transient protection: No damage (may shut down) when exposed to abnormal surges IAW MIL-STD-1275A (100 V for 50 ms) and MIL-STD-704A (80 V for 0.1 s)	

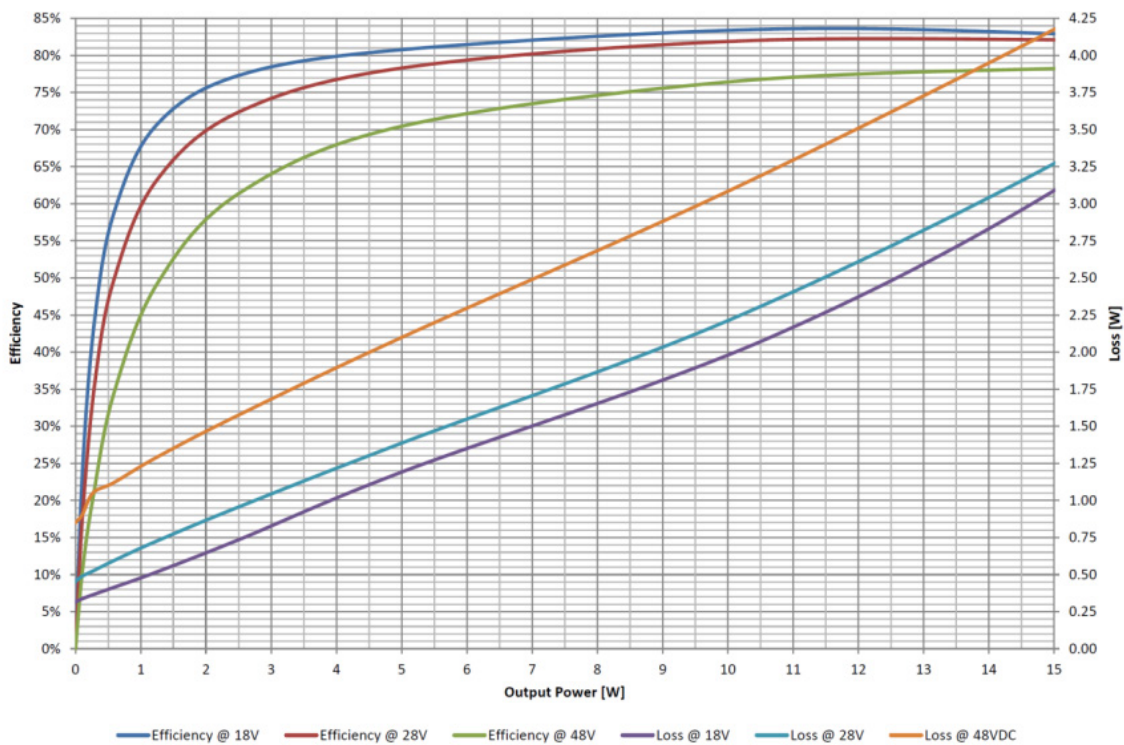
DC OUTPUT (floating)		
Voltage Regulation: Up to $\pm 1\%$ (no load to full load, -55°C to $+85^{\circ}\text{C}$)	Ripple and Noise: 50 mVp-p, typical (max. 1%)	Current Limiting (Hiccup): Continuous protection for unlimited time
Over Voltage Protection: Passive transorb on output.	Over Temperature Protection: Shutdown if baseplate temperature exceeds $+105^{\circ}\text{C} \pm 5^{\circ}\text{C}$. Automatic recovery when baseplate temperature returns to below $+95^{\circ}\text{C} \pm 5^{\circ}\text{C}$.	Isolation: Output to Case: 100 VDC

PRODUCT SPECIFICATIONS:

ENVIRONMENTAL CONDITIONS	
Meets or exceeds MIL-STD-810F	Temperature: Operating -55°C to +85°C (baseplate) Storage -55°C to +125°C

EFFICIENCY PLOT:

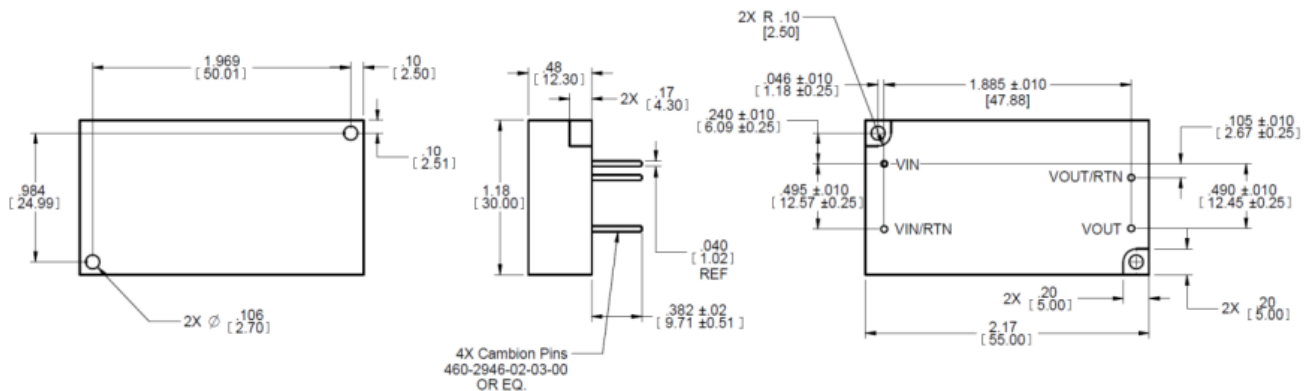
M7117-100 variant (5 VDC / 3A):



PIN ASSIGNMENT:

Pin No.	Pin Name	Description	Polarity
1	VOUT	Output	+
2	VOUT RTN	Output Return	-
3	VIN	Input	+
4	VIN RTN	Input Return	-

OUTLINE DRAWING:



Notes:

- Dimensions are in mm
- Tolerance is:
.XX ± 0.2MM
.XXX ± 0.1MM
- Weight: Approx. 1.06 oz (30 g)

Notice: Specifications are subject to change without notice. Contact your nearest Amphenol Corporation Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements or suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should assume that all safety measures are indicated or that other measures may not be required. Specifications are typical and may not apply to all connectors.

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PRELIMINARY

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