

M7128 SERIES

DC/DC POWER SUPPLY



DESCRIPTION

The M7128 military power supply is a rugged DC to DC converter which accepts an 18 - 78VDC input voltage range and provides a single DC output from 1.5 to 78V at up to 200W. 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

- Miniature size
- High efficiency
- Wide input range
- Up to 29 W/IN³
- Input / Output isolation
- Remote sense
- Parallel connection of modules
- Redundancy connection
- Fixed switching frequency (250 kHz)
- External synchronization capability

- TTL logic enable
- EMI/RFI filters included
- Output voltage adjustment with external resistor
- Indefinite short circuit protection with auto-recovery
- Over-voltage shutdown with auto-recovery
- Over temperature shutdown with auto-recovery



HOW TO ORDER

PART NUMBER	CF-	DC/DC POWER SUPPLY

ELECTRICAL SPECIFICATIONS

DC INPUT	DC OUTPUT (FLOATING)
DC Input range: 18 to 48 VDC 33 to 78 VDC	Line/Load regulation: Less than 1% (no load to full load, -55°C to +85°C) Ripple and Noise: 50mVp-p, typical (max. 1%)
Efficiency: 78 to 84%	Current limiting (Hiccup): Continuous protection for unlimited time
EMI/RFI: Designed to meet MIL-STD-461F* CE101, CE102, CS101, CS114, CS115, CS116, RE101, RE102, RS101, RS103	Over voltage protection: Electronic shutdown with automatic recovery and a passive transorb on output.
Isolation: 200V between Input and Output 200V between Input and Case	Over temperature protection: Shutdown at baseplate temperature of +105°C (±5°C) Automatic recovery at baseplate temperature lower than +95°C (±5°C)
	Isolation: 200V between Output and Input 100V between Output and Case



ENVIRONMENTAL	RELIABILITY
Meets or exceeds MIL-STD-810D	150,000 hours, calculated per
Temperature:	MIL-STD-217F at +85°C baseplate,
Operating –55°C to +85°C (baseplate)	ground fixed.
Storage –55°C to +125°C	

PIN ASSIGNMENT

Pin No.	Pin Function	
1	+VIN	
2	+VIN	
3	- VIN	
4	- VIN	
5	PAR IN	
6	PAR OUT	
7	*IN SIGNAL RTN	
8	SYNC OUT	
9	+OUT	
10	+OUT	

Pin No.	Pin Function	
11	+OUT	
12	- OUT	
13	- OUT	
14	- OUT	
15	+SENSE	
16	+VIN	
17	+VIN	
18	- VIN	
19	- VIN	
20	INHIBIT	

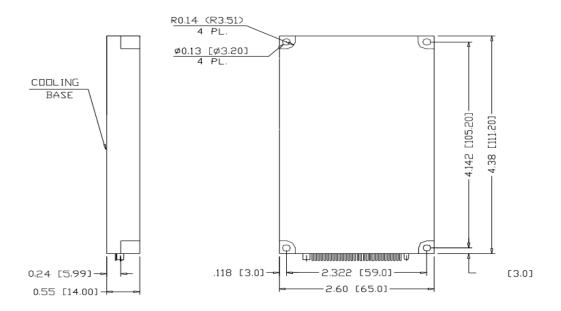
Pin No.	Pin Function	
21	OUT V/CAL	
22	**OUT SIGNAL RTN	
23	SYNC IN	
24	+OUT	
25	+OUT	
26	+OUT	
27	- OUT	
28	- OUT	
29	- OUT	
30	- SENSE	

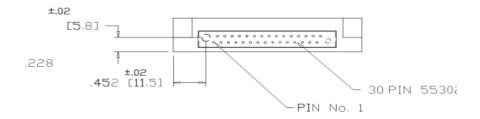
^{*}SIGNAL IN RTN FOR SYNC IN, SYNC OUT AND INHIBIT

^{**}SIGNAL OUT RTN FOR PAR IN, PAR OUT AND V/CAL



OUTLINE DRAWING





Notes

- 1. Dimensions are in Inches [mm]
- 2. Tolerance is:

 $.XX \pm 0.02 IN$

.XXX \pm 0.01 IN

- 3. Weight: 7.77 oz (224g)
- 4. Add suffix SL to specify connector with guide set per M55302/57-A30X

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