

MI-200 Series

50-100 WATTS MILITARY COTS DC/DC CONVERTER

Features

- 28Vdc Inputs per MIL-STD-704D/E/F
- 155Vdc Inputs per MIL-STD-1399A
- 270Vdc Inputs per MIL-STD-704D/E/F
- MIL-STD-810 environments
- OVP and Thermal shutdown
- Power boosters for higher power
- Low noise FM control



Specifications

INPUT

Input Voltage See input voltage chart

No Load Power Dissipation Typ 1.35W

OUTPUT

Set point accuracy 0.5% V nom typical

Load/Line regulation 0.05% V nom typical. 10% to full load

Output temperature drift 0.01%/°C

Output noise 1%pp V nom

Output Voltage Trimming 50% - 110%

Remote Sense Compensation 0.5 V

Current limit 105% - 125%

Short Circuit Current 20% - 130%

OPERATING

Isolation Input - Output 3,000Vrms
Output to Baseplate 500Vrms
Input to Baseplate 1,500Vrms

Efficiency 80 - 90%

ENVIRONMENTAL

	I Grade	M Grade
Storage Temperature	-55°C to +100°C	-65°C to +100°C
Operating Temperature (baseplate)	-40°C to +85°C	-55°C to +85°C
Power Cycling Burn-in	12hrs 25 cycles	96hrs 200 cycles
Temperature Cycled With Power off	48 hrs, 12cycles -65°C to +100°C	48hrs, 12cycles -65°C to +100°C
Test Data Supplied at these temperature	-40°C to +80°C	-55°C to +80°C

Note: For Technical Illustration refer to page 230 in Module Section

STANDARDS AND APPROVALS

Environment (MIL-STD-8100)

Altitude - Method 500.2 70,000 feet

Humidity - Method 507.2 86/240 (% /hours)

Acceleration - Method 513.3 9 g's

Vibration - Method 514.3 20g's

Shock - Method 516.3 40g's

Reliability (MIL-HDBK-217F)

25°C Ground Benign 3,277,000 hours

50°C Naval Sheltered 1,999,000 hours

65°C Airborne inhabited cargo 1,540,000 hours

Derating NAVMAT P-4855-1A

C-Tick AS/NZS2064:1997 Group 1 Class AEMC filters supplied with some models

MECHANICAL

Weight 170 grams

Dimensions 116.8 x 61 x 12.7mm

Selection Table MI-2(A)(B)-(C)(D)

A = INPUT VOLTAGE			B = OUTPUT VOLTAGE			
VNOM	RANGE	TRANS.	Z=2V	T = 6.5V	2 = 15V	K = 40V
2= 28V	18-50V (1)	60V	Y = 3.3V	R = 7.5V	N = 18.5V	J = 48V
5= 155V	100-210V	230V	0= 5V	M = 10V	3 = 24V	
6= 270V	125-400V (2)	475V	X= 5.2V	1 = 12V	L = 28V	
7= 165V	100-310V		V= 5.8V	P = 13.8V	J = 36V	
C = PRODUCT GRADE			D = OUTPUT POWER/CURRENT			
I= -40°C to +85°C			≥5V	<5V		
M=-55°C to +85°C			Y = 50W	Y = 10A		
			X = 75W	X = 15A		
			W = 100W	W = 20A		
			V= -	V = 30A		

Note :(1) 16V operation at 75% load. (2) These units rated at 75% load from 125-150Vin: MI-26Z-XV, MI-26Y-XV, MI-260-XW.