MI-200 Series

50 TO 100 WATT DC/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 +85VC
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.				
2= 28V	18–50V (1)	60V	Z=2V	T = 6.5V	2 = 15V	K = 40V
5= 155V	100–210V	230V	Y= 3.3V	R = 7.5V	N = 18.5V	J = 48V
6= 270V	125–400V (2)	475V	0= 5V	M = 10V	3 = 24V	
7= 165V	100–310V		X= 5.2V	1 = 12V	L = 28V	
			V= 5.8V	P = 13.8V	J = 36V	

C = PRODUCT GRADE	D = OUTPUT POWER/CURRENT	
	⩾5V	<5V
I= -40°C to +85°C	Y = 50W	Y = 10A
M=-55°C to +85°C	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.