

FEATURES

- PIN-OUT COMPATIBLE WITH LM78XX LINEAR REGULATORS
- SMALL SIZE AND LOW PROFILE : L X W X H = 0.45" X 0.35" X 0.69"
- HIGH EFFICIENCY UP TO 97%
- LOW STANDBY CURRENT
- SHORT CIRCUIT PROTECTION
- OVER-TEMPERATURE PROTECTION
- LOW OUTPUT RIPPLE AND NOISE
- FIXED SWITCHING FREQUENCY
- NEGATIVE OUTPUT APPLICATION (OPTIONAL)
- DESIGN MEETS UL60950-1, EN60950-1 AND IEC60950-1
- COMPLIANT TO RoHS

APPLICATIONS

Wireless Network
Telecom/Datacom
Industry Control System
Distributed Power Architectures
Semiconductor Equipment
Microprocessor Power Applications

DESCRIPTION

The PM-1000B SERIES are high performance switching regulators are suited to replace 78xx linear regulators and pin compatible. It provides 1A output current and high efficiency up to 96%. The PM1000B series also can be used to converter a positive voltage into negative voltage.

TECHNICAL SPECIFICATION All specifications are typical at nominal input, full load and 25°C otherwise noted

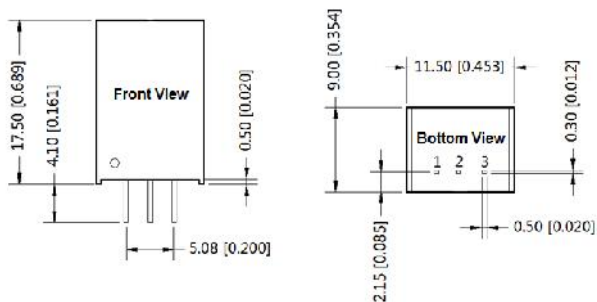
OUTPUT SPECIFICATIONS		INPUT SPECIFICATIONS	
Output current	See table	1000mA, max.	Input voltage range for Positive output See table
Voltage accuracy		±2%Vo	4.75 ~ 32VDC
Line regulation		± 0.2%Vo	Maximum input current
Load regulation	10% to 100% of F.L	± 0.4%	Vin=Vin(min), Io=Io(max)
Ripple and noise	Typ. 25mVp-p	Max.35mVp-p	Input filter
20MHz bandwidth			C filter
Temperature coefficient		±0.02%/°C, max.	Input reflected ripple current
Cooling Method		Free air flow	100mA
Output short-circuit		Continuous, automatic recovery	
GENERAL SPECIFICATIONS		ENVIRONMENTAL SPECIFICATIONS	
Efficiency (Note 3)	See table	Operating temperature range	-40°C ~ +85°C(with derating)
Isolation voltage	None	Storage temperature range	-55°C ~ +125°C
Switching frequency (KHz)	100%load, Typ. 330	Case Max Operating Temperature	100°C
Design meet safety standard	IEC60950-1, UL60950-1, EN60950-1	Relative humidity(non-condensing)	0% to 95% RH
Case material	Non-conductive black plastic	Over temperature protection (Internal IC junction)	150 °C
Base material	None	FEATURE SPECIFICATIONS	
Potting material	Silicon (UL94-V0)	Start up time	Nominal Input and constant resistive load
Dimensions	0.45" X 0.35" X 0.69", Inch (11.5 X 9 X 17.5 mm)	Power up	0.5mS
Weight	3.7g	Thermal Impedance	85
MTBF (Note 1)	MIL-HDBK-217F@25 °C		
	2000K hours		

- Note
1. BELLCORE TR-NWT-000332. Case I: 50% Stress, Temperature at 40°C. (Ground fixed and controlled environment)
MIL-HDBK-217F Notice2 @Ta=25 °C, Full load (Ground, Benign, controlled environment)
 2. Typical value at nominal input and no load.
 3. Typical value at minimum input or maximum input voltage and full load.
 4. Tested with minimum input and constant resistive load.

CAUTION: This power module is not internally fused. An input line fuse must always be used.

Model Name	Input Voltage	Nominal Input	Output Voltage	Output Current	Efficiency (%) (3)	
				Max. Load	Min. Vin	Max. Vin
PM-1000B033	4.75 ~ 28VDC	24VDC	3.3VDC	1000mA	91	83
PM-1000B050	6.5 ~ 32VDC	24VDC	5.0VDC		93	88
PM-1000B065	9 ~ 32VDC	24VDC	6.5VDC		94	90
PM-1000B090	12 ~ 32VDC	24VDC	9.0VDC		95	92
PM-1000B120	16 ~ 32VDC	24VDC	12.0VDC		96	94
PM-1000B150	20 ~ 32VDC	24VDC	15.0VDC		97	94

Mechanical Drawing:



PIN CONNECTION	
PIN	DEFINE
1	+VIN
2	GND
3	+VOUT

Note:
 Unit :mm[inch]
 Pin diameter tolerances :±0.10[±0.004]
 General tolerances:±0.25[±0.010]