



PM-100MD078

Input Range	Output Voltage	Output Current	Line Regulation	Load Regulation	Input Current		Eff ⁽³⁾ (%)	Capacitor ⁽⁴⁾ Load max.
					No Load ⁽²⁾	Full Load ⁽¹⁾		
43-160 VDC	24 VDC	4.16 A	120 mV	120 mV	10mA	1.086 A	87	1700 μ F

TECHNICAL SPECIFICATION

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

OUTPUT SPECIFICATIONS		
Output power		100Watts max.
Output voltage		24VDC
Output current	Nominal	4.16A, max.
Voltage accuracy	Full load and nominal Vin	±1%
Voltage adjustability (Note 6)		+10% , -20%
Minimum load		0%
Line regulation	LL to HL at FL	See table
Load regulation	No Load to Full Load	See table
Remote sense (Note 7)		10% of Vout
Ripple and noise	20MHz bandwidth (Note 8)	200mVp-p
Temperature coefficient		± 0.02% / °C, max.
Transient response recovery time	25% load step change	250 μ S
Over voltage protection threshold (Non-latching Hiccup)		115% ~ 130% of Vout
Over current protection threshold		140%, typ.
Short circuit protection		Hiccup, automatics recovery

INPUT SPECIFICATIONS		
Input voltage range	110V nominal input	43 – 160VDC
Start-up voltage		43VDC,max.
Shutdown voltage		40VDC,typ.
Input filter		PI type
Input surge voltage	100mS max	170VDC
Start up time	Nominal Vin and constant resistive load	Power up 50mS, typ. Remote ON/OFF 50mS, typ.
Remote ON/OFF (Note 5) (Positive logic)	DC-DC ON	Open or 3V < Vr < 12V
	DC-DC OFF	Short or 0V < Vr < 1.2V
Input current of Remote control pin	Vin(nom)	-0.5mA ~ 1mA
Remote off input current	Vin(nom)	3mA

GENERAL SPECIFICATIONS		
Efficiency		87%, typ.
Isolation voltage	Input to Output	2250VDC, min.
	Input (Output) to base-plate	2250VDC, min.
Isolation resistance		10 ⁷ ohms, min.
Isolation capacitance		3000pF, max.
Switching frequency		300KHz, typ.
Design meet safety standard		EN50155, EN61373
Case material		Aluminum base-plate with plastic case
Potting material		Silicon (UL94-V0)
Dimensions		2.40 X 2.28 X 0.50 Inches (61.0×57.9×12.7 mm)
Weight		102g (3.6oz)

ENVIRONMENTAL SPECIFICATIONS	
Operating base-plate temperature range (Note 9)	-40°C to +100°C
Over temperature protection(base-plate)	110°C, typ.
Storage temperature range	-55°C to +125°C
Relative humidity	5% to 95% RH





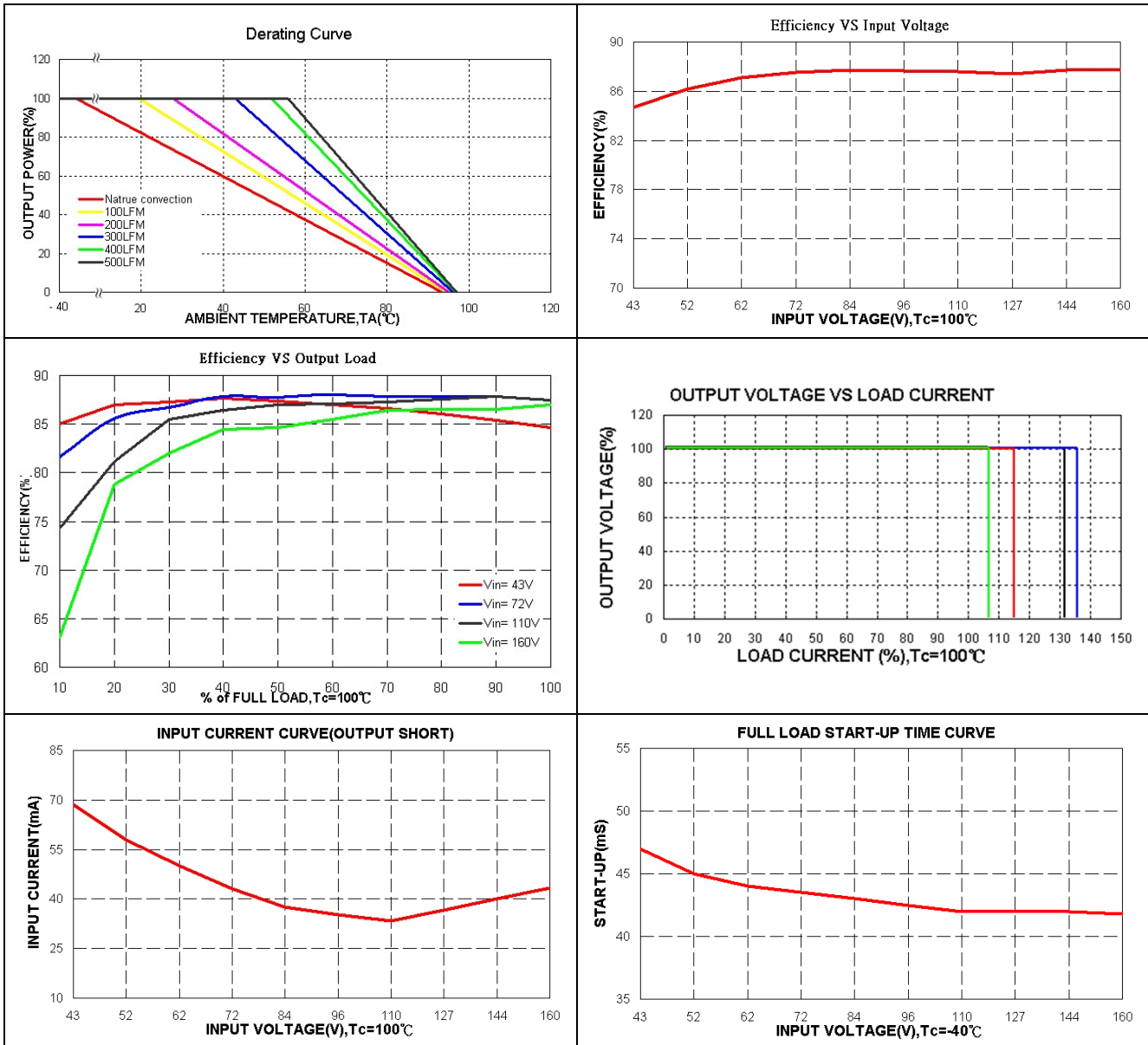
Note

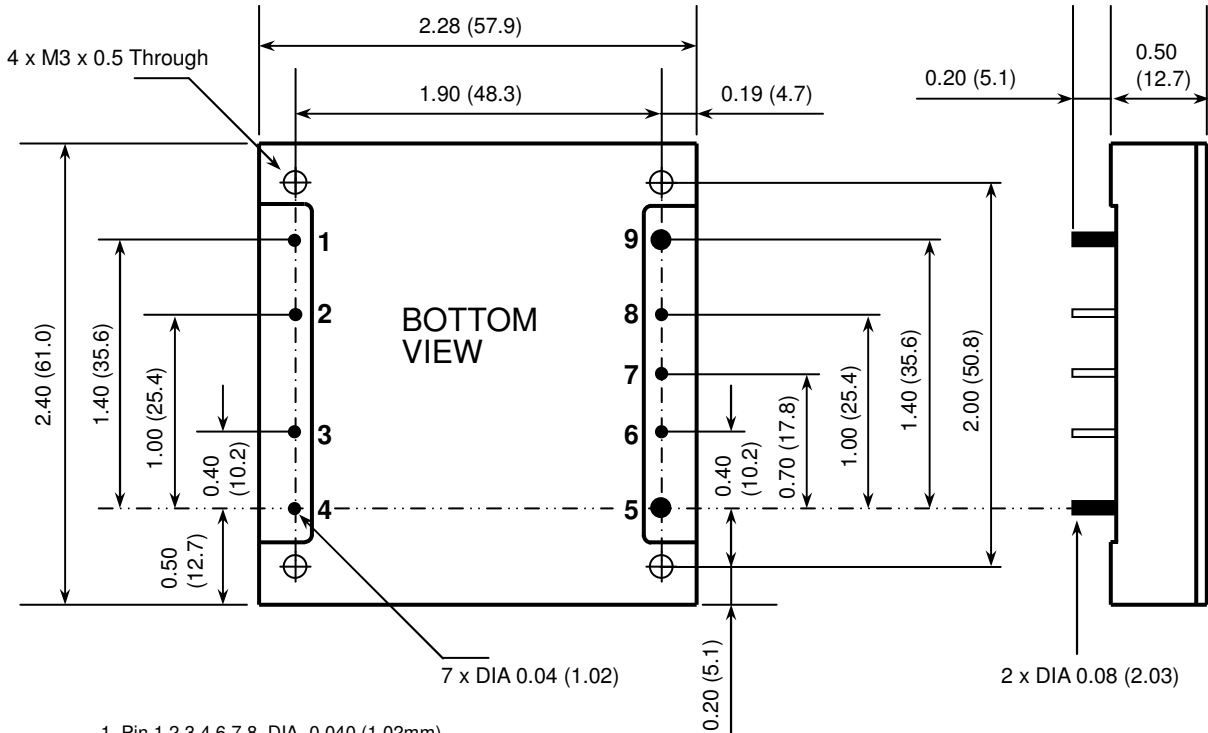
1. Maximum value at nominal input voltage and full load.
2. Typical value at nominal input voltage and no load.
3. Typical value at nominal input voltage and full load.
4. Test by minimum Vin and constant resistive load.
5. The pin voltage is referenced to negative input.
6. Output voltage is adjustable for 10% trim up or -20% trim down of nominal output voltage by connecting a single resistor between TRIM and +SENSE pins for trim up or between TRIM and -SENSE pins for trim down. To calculate the value of the resistor Ru and Rd for a particular output voltage uses the following equation:

$$R_U = \left(\frac{V_{OUT}(100 + \Delta\%)}{1.225\Delta\%} - \frac{(100 + 2\Delta\%)}{\Delta\%} \right) K\Omega$$

$$R_D = \left(\frac{100}{\Delta\%} - 2 \right) K\Omega$$

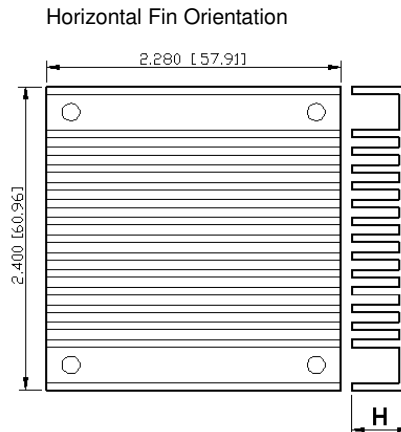
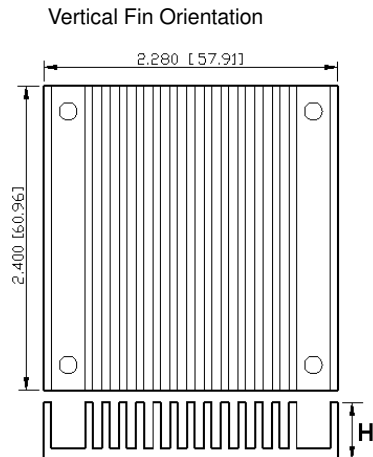
7. Maximum output deviation is +10% inclusive of remote sense. If remote sense is not being used, the +SENSE should be connected to its corresponding +OUTPUT and likewise the -SENSE should be connected to its corresponding -OUTPUT.
8. Measured with a 1µF M/C and a 4.7µF M/C
9. Heat sink is optional and P/N: 7G-0021A-F, 7G-0022A-F, 7G-0023A-F, 7G-0024A-F





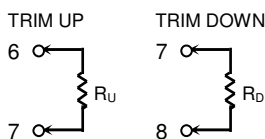
1. Pin 1,2,3,4,6,7,8. DIA. 0.040 (1.02mm)
Pin 5,9. DIA. 0.080 (2.03mm)
2. All dimensions in inches (mm)
3. Tolerance :x.xx±0.02 (x.xx±0.5)
x.xxx±0.01 (x.xx±0.25)
4. Pin pitch tolerance ±0.01 (0.25)
5. Pin dimension tolerance ±0.004(0.1)

Product option			Suffix
Heat-sink	H= 0.24" Vertical	7G-0023A-F	- HS2
	H= 0.45" Vertical	7G-0021A-F	- HS
	H= 0.24" Horizontal	7G-0022A-F	- HS1
	H= 0.45" Horizontal	7G-0024A-F	- HS3



EXTERNAL OUTPUT TRIMMING

Output can be externally trimmed by using the method shown below.



PIN CONNECTION

PIN	Define	Diameter
1	- INPUT	0.04 Inches
2	NC	0.04 Inches
3	CTRL	0.04 Inches
4	+ INPUT	0.04 Inches
5	+ OUTPUT	0.08 Inches
6	+ SENSE	0.04 Inches
7	TRIM	0.04 Inches
8	- SENSE	0.04 Inches
9	- OUTPUT	0.08 Inches