

50MHz to 1.0GHz Modulator - PMI Model No. PSM-50M1G-CD-1

Input Parameters:

RF Carrier: 50MHz to 1.0GHz
RF VSWR (RF=-10dBm, IF modulation =+10dBm): 2.0:1 typ.
RF Power at 1dB compression (IF = +10dBm): +5dBm typical
IF Modulation Frequency Range: DC to 10MHz
IF Modulation Power Range (50 Ohms): +7dBm min, +13dBm max.

Transfer Characteristics:

Conversion Loss: 10dBm max. (See Note 1)
Carrier Suppression: 15dBc min., 20dBc typ.
Quadrature Phase Accuracy, I/Q mode: ± 7.5 degrees typ., ± 10 degrees max.
Quadrature Amplitude Accuracy: ± 1.5 dB typ., ± 2.0 dB max.

Output Parameters:

RF Frequency Range: 50MHz to 1.0GHz
RF VSWR (RF=-10dBm, IF modulation =+10dBm): 3.0:1 typ.

Finish: Nickel plate.
Dimensions: 6.00" X 3.50" X 1.00"
Connectors: SMA Female, 4 Places.

Note 1: Insertion loss relative to 0dBm RF input.
All other outputs including f_0 are relative to the desired upper (f_0+f_m) output.

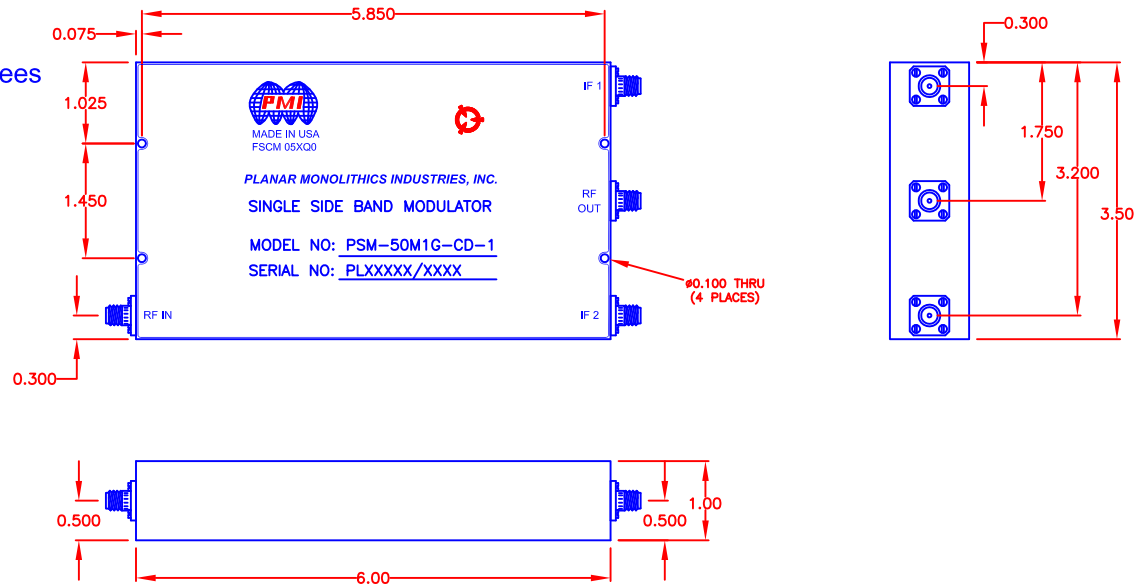
ENVIRONMENTAL RATINGS

- **TEMPERATURE:** -40°C TO +85°C (OPERATING)
..... -65°C TO +125°C (STORAGE)
- **HUMIDITY:** MIL-STD-202F, METHOD 103B COND. B
- **SHOCK:** MIL-STD-202F, METHOD 213B COND. B
- **VIBRATION:** MIL-STD-202F, METHOD 204D COND. B
- **ALTITUDE:** MIL-STD-202F, METHOD 105C COND. B
- **TEMPERATURE CYCLE:** MIL-STD-202F, METHOD 107D COND. A

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ± 0.020
X.XXX ± 0.010

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	12/7/10	
	A2	ECN # 13-0101	07/31/13	
	A3	ECN # 14-0175	11/10/14	



PMI CONFIDENTIAL AND PROPRIETARY

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ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE	
DRAWN		12/7/10		PRODUCT FEATURE	
MODIFIED				PSM-50M1G-CD-1	
ISSUED					
SIZE		FSCM NO.		DWG NO.	
A		05XQ0		27014981	
SCALE		N:S		SHEET	
				1 OF 1	