

0.5 to 2.5GHz Modulator - PMI Model No. PSM-0R5G2R5G-CD-1

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	12/7/10	PK

Input Parameters:

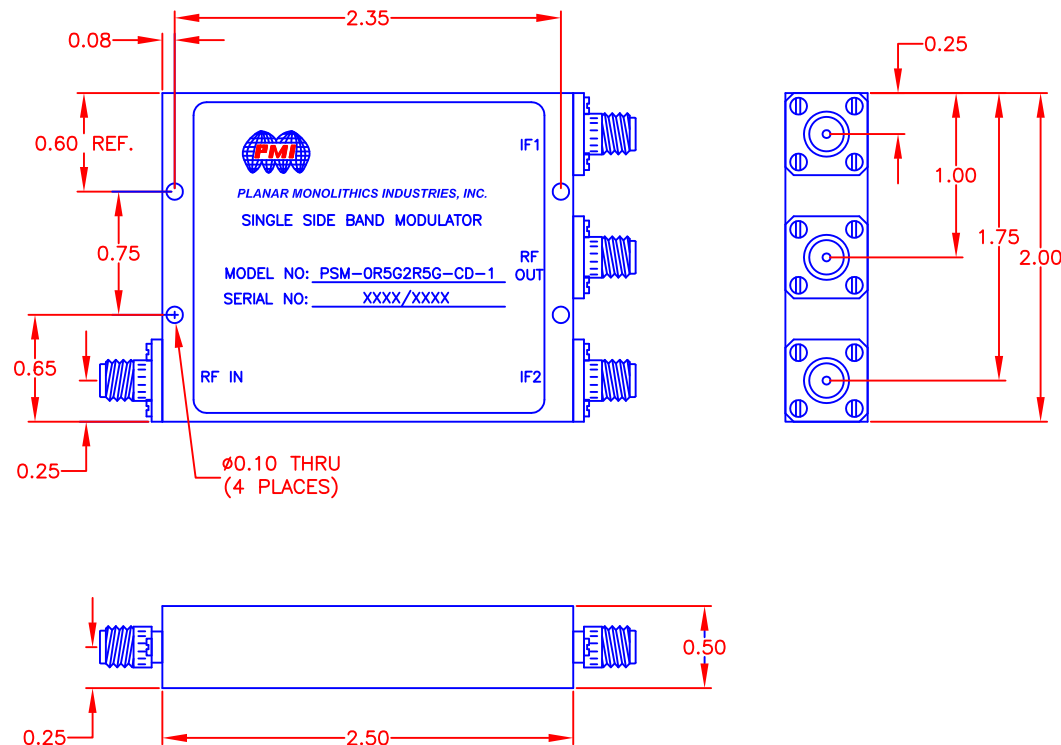
RF Carrier: 0.5 to 2.5GHz
RF VSWR (RF=-10dBm, IF modulation =+10dBm): 2.0:1 typ.
RF Power at 1dB compression (IF = +10dBm): +5dBm typical
IF Modulation Frequency Range: DC to 500MHz
IF Modulation Power Range (50 Ohms): +7dBm min, +13dBm max.

Transfer Characteristics:

Conversion Loss: 13.5dB max. (See Note 1)
Carrier Suppression: 20dBc min., 23dBc typ.
Carrier - Fundamental IF: 15dBc min.
Carrier $\pm$ 2IF, 4IF, etc.: 35dBc typ.
Carrier $\pm$ 3IF: 7dBc typ.
Quadrature Phase Accuracy, I/Q mode: $\pm$ 7.5 degrees typ., $\pm$ 10 degrees max.
Quadrature Amplitude Accuracy: $\pm$ 1.5dB typ., $\pm$ 2.0dB max.

Output Parameters:

RF Frequency Range: 0.5 to 2.5GHz
RF VSWR (RF=-10dBm, IF modulation =+10dBm): 4.0:1 typ.



Note 1: Insertion loss relative to 0dBm RF input.
All other outputs including f0 are relative to the desired upper (f0+m) output.

Finish: Nickel plate.
Dimensions: 2.50" X 2.00" X 0.50"
Connectors: SMA Female, 4 Places.

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 $\pm$ 0.020
X.XXX $\pm$ 0.010

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APPROVALS		DATE		TITLE	
DRAWN		12/7/10		PRODUCT FEATURE	
MODIFIED				PSM-0R5G2R5G-CD-1	
ISSUED					
SIZE		FSCM NO.		DWG NO.	
A		05XQ0		27015001	
SCALE		N:S		SHEET	
				1 OF 1	