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	SK

Input Parameters:

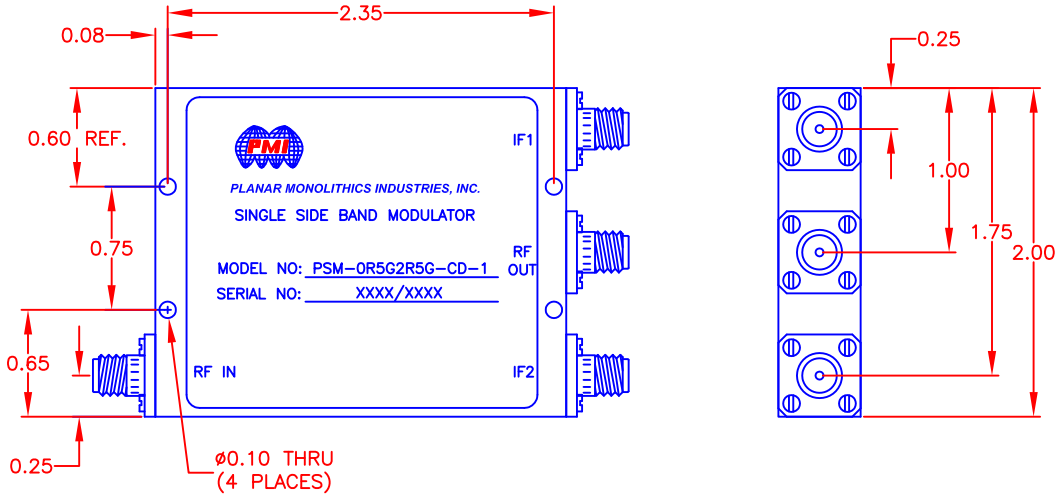
RF Carrier: 0.5 to 2.5GHz
RF VSWR (RF=-10dBm, IF modulation =+10dBm): 2.0:1 typ.
RF Power at 1dB compression (IF = +10dBm): +5dBm typical
IF Modulation Frequency Range: DC to 500MHz
IF Modulation Power Range (50 Ohms): +7dBm min, +13dBm max.

Transfer Characteristics:

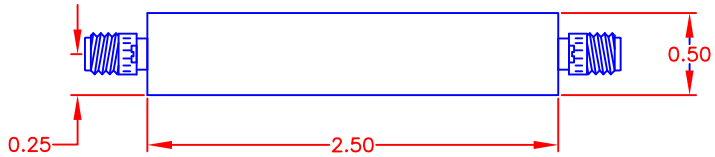
Conversion Loss: 13.5dB max. *(See Note 1)*
Carrier Suppression: 20dBc min., 23dBc typ.
Carrier - Fundamental IF: 15dBc min.
Carrier ± 2IF, 4IF, etc.: 35dBc typ.
Carrier ± 3IF: 7dBc typ.
Quadrature Phase Accuracy, I/Q mode: ± 7.5 degrees typ., ± 10 degrees max.
Quadrature Amplitude Accuracy: ± 1.5dB typ., ± 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 ±0.020
X.XXX ±0.010

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APPROVALS	DATE
DRAWN KM	12/7/10
MODIFIED	
ISSUED	

TITLE: PRODUCT FEATURE
PSM−0R5G2R5G−CD−1

SIZE	FSCM NO.	DWG NO.	REV.
A	05XQ0	27015001	A

SCALE N:S SHEET 1 OF 1