

DESCRIPTION

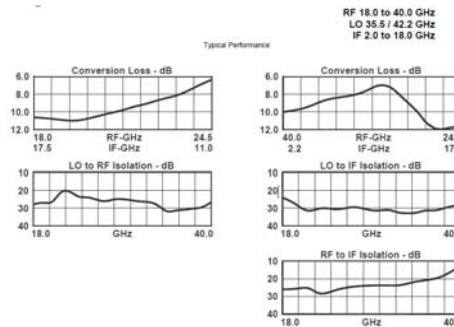
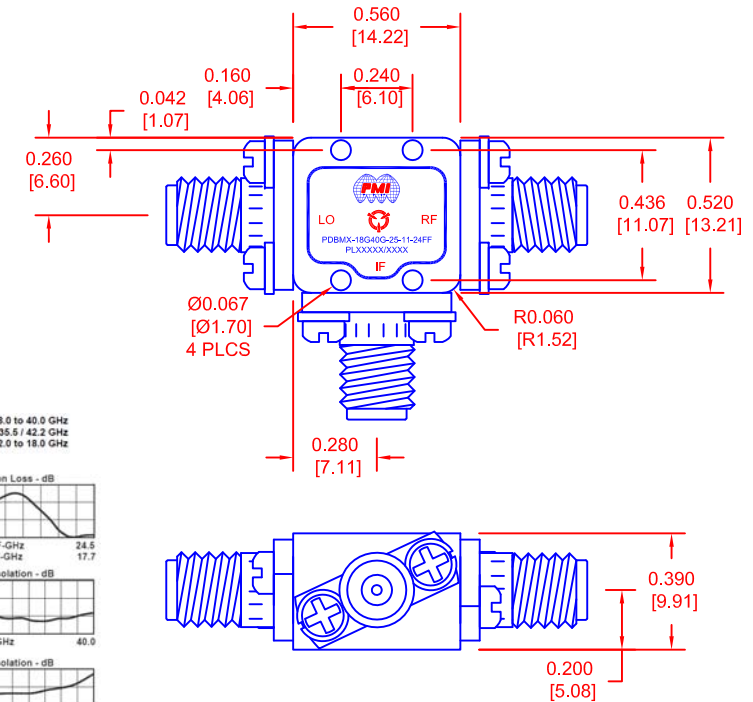
PMI MODEL: PDBMX-18G40G-25-11-24FF IS A DOUBLE-BALANCED MIXER OPERATING FROM 18.0 TO 40.0 GHz. THIS UNIT PROVIDES A TYPICAL ISOLATION OF 25 dB AND A CONVERSION LOSS OF 11.0 dB. THIS MIXER IS OUTFITTED WITH 2.4mm FEMALE CONNECTORS ON A 0.56" x 0.52" x 0.39" PACKAGE.

SPECIFICATIONS

- RF FREQUENCY RANGE: ----- 18.0 TO 40.0 GHz
- LO FREQUENCY RANGE: ----- 35.5 TO 42.2 GHz
- IF FREQUENCY RANGE: ----- 2.0 TO 18 GHz
- ISOLATION: ----- 25 dB TYP (LO TO RF)
25 dB TYP (LO TO IF)
25 dB TYP (RF TO IF)
- INPUT 1dB COMPRESSION: ----- +6 dBm (+13 TO +17 dBm LO Drive Level)
- INPUT TWO-TONE IP3: ----- +16 dBm (+13 TO +17 dBm LO Drive Level)
- CONVERSION LOSS: ----- 11.0 dB TYP.
- CONNECTORS: ----- 2.4mm FEMALE
- SIZE: ----- 0.56" x 0.52" x 0.39"
14.22 mm x 13.21 mm x 9.91 mm
- FINISH: ----- BLUE EPOXY POLIMIDE COATING IAW MIL-C-22750, TYPE I OVER EPOXY POLIMIDE PRIMER IAW MIL-P-23377, TYPE I, CLASS 1 OR 3.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	1/22/18	

MECHANICAL OUTLINE



DATA SHEET NOTES:

- Mixer Noise Figure typically measures within +0.5 dB of conversion loss for IF frequencies greater than 5 MHz.
- Conversion Loss typically degrades less than 0.5 dB for LO drives 2 dB below the lowest and 3 dB above highest nominal LO drive levels.
- Conversion Loss typically degrades less than 0.5 dB at +100°C and improves less than 0.5 dB at -55°C.
- Maximum input power is +23 dBm at +25°C, derated linearly to +20 dBm at +100°C.

ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- -55 °C TO +85 °C (OPERATING)
-65 °C TO +125 °C (STORAGE)
- HUMIDITY: ----- MIL-STD-202, METHOD 103B COND. B
- SHOCK: ----- MIL-STD-202, METHOD 213B COND. B
- VIBRATION: ----- MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: ----- MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: ----- MIL-STD-202, METHOD 107D COND. A

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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

PMI CONFIDENTIAL AND PROPRIETARY

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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN <i>JPH</i>		1/22/18	PRODUCT FEATURE PDBMX-18G40G-25-11-24FF			
CHECKED			SIZE A	FSCM NO. 05XQ0	DWG NO. PRELIMINARY	REV. -
ISSUED			SCALE N:S		SHEET 1 OF 1	