

DESCRIPTION

PMI MODEL IQM-2G18G-SFF IS AN I/Q MIXER WHICH OPERATES OVER THE FREQUENCY RANGE OF 2 GHz TO 18 GHz. THIS MODEL OFFERS AN IF BANDWIDTH OF DC TO 3.0 GHz

SPECIFICATIONS		TEST CONDITIONS	
• RF/LO FREQUENCY RANGE: IF FREQUENCY RANGE:			2.0 GHz TO 18.0 GHz DC TO 3 GHz
			2.0:1 TYP 2.5:1 TYP
• I/Q CONVERSION LOSS:		RF/LO = 2-18 GHz I/Q = DC-0.2 GHz	11 dB TYP, 13 dB MAX
		RF/LO = 2-18 GHz I/Q = 0.2-3 GHz	11.5 dB TYP, 15 dB MAX
• LO TO RF ISOLATION: LO TO IF ISOLATION: RF TO IF ISOLATION:		2-18 GHz	58 dB TYP 28 dB TYP 36 dB TYP
• AMPLITUDE BALANCE:		RF/LO = 2-18 GHz IF = 0.091	0.5 dB
• PHASE BALANCE:		RF/LO = 2-18 GHz IF = 0.091	5°
• INPUT IP3	IMAGE REJECT DOWNCONVERSION	RF/LO = 2-18 GHz IF = 0.091	17 dBm TYP
	I/Q DOWNCONVERSION	RF/LO = 2-18 GHz I = 0.091	16 dBm TYP
	SIDEBAND UPCONVERSION	RF/LO = 2-18 GHz I = 0.091	18 dBm TYP
	I/Q UPCONVERSION	RF/LO = 2-18 GHz I/Q = 0.091	16 dBm TYP
	I/Q UPCONVERSION	RF/LO = 2-18 GHz I/Q/IF = 0.091	2 dBm
• INPUT 1 dB GAIN COMPRESSION POINT	COMBINED UPCONVERSION	RF/LO = 2-18 GHz IF = 0.091	5 dBm
	DOWNCONVERSION	RF/LO = 2-18 GHz I/Q/IF = 0.091	5 dBm
• IF OUTPUT FREQUENCY:			DC TO 500 MHz
• IF OUTPUT VSWR:			1.5:1 TYP
• CONNECTORS:			RF: SMA FEMALE
• SIZE (EXCLUDING CONNECTORS):			0.800" x 0.800" x 0.369" 20.32 mm x 20.32 mm x 9.37 mm
• FINISH:			PAINTED BLUE

ABSOLUTE MAXIMUM RATINGS

- I PORT DC CURRENT:----- 30 mA
- Q PORT DC CURRENT:----- 30 mA
- POWER HANDLING AT ANY PORT:----- +26 dBm

ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- -55 °C TO +100 °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

TRUTH TABLE		
PORT	RF < LO	RF > LO
I	0	-90
Q	-90	0

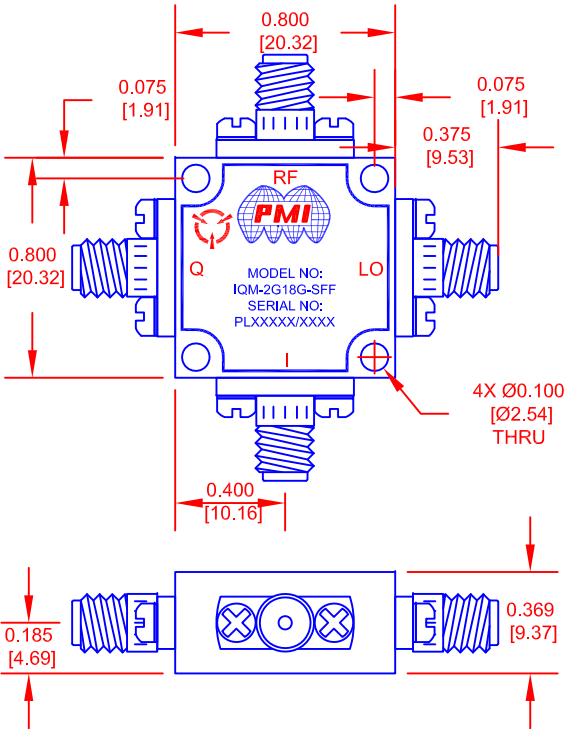
ALL DIMENSIONS
ARE IN INCH [mm]
TOLERANCES:
X.XX ±0.020 [0.508]
X.XXX ±0.010 [0.254]

PMI CONFIDENTIAL AND PROPRIETARY

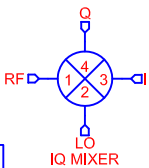
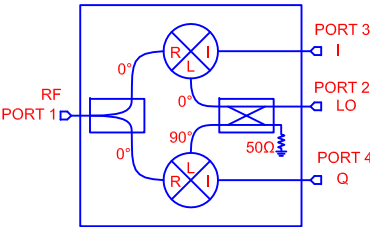
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	07/27/20	

MECHANICAL OUTLINE



BLOCK DIAGRAM



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APPROVALS		DATE		TITLE	
DRAWN		7/27/20		PRODUCT FEATURE IQM-2G4G-SFF	
CHECKED					
ISSUED					
SIZE	FSCM NO.	DWG NO.	REV.		
A	05XQ0	PRELIMINARY	-		
SCALE	N:S	SHEET	1 OF 1		