ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	3/13/2026	

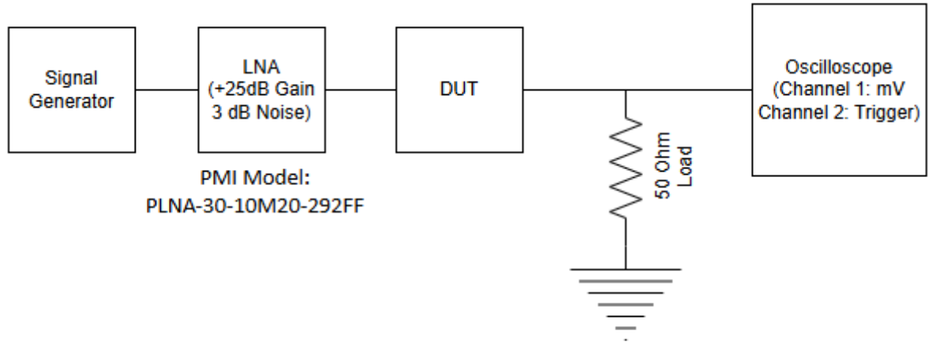
DESCRIPTION:

PMI MODEL NUMBER DD-0R5G18G-POS-MF-ROHS IS A 0.5 GHz TO 18.0 GHz, HIGH SPEED, HIGH SENSITIVITY DIODE DETECTOR REQUIRING NO BIAS AND OFFERING A RESPONSE TIME OF LESS THAN 20 ns.

SPECIFICATIONS:

- FREQUENCY RANGE:..... 0.5 GHz TO 18.0 GHz
- VSWR (INPUT):..... 3.5 : 1 MAX. (MEASURED @ -10dBm)
- FREQUENCY FLATNESS:..... ±1.5 dB MAX. WITH 10 MΩ LOAD
  ±1.5 dB MAX. WITH 1 MΩ LOAD
- VOLTAGE SENSITIVITY:..... 700 mV/mW TYP. WITH 10 MΩ LOAD
  (SQUARE-LAW REGION) 300 mV/mW TYP. WITH 1 MΩ LOAD
- TANGENTIAL SENSITVITY[1]:..... -40 dBm @ 500 MHz VIDEO BANDWIDTH
- OUTPUT VOLTAGE:..... POSITIVE
- MAX INPUT POWER:..... +20 dBm MAX.
- RISE/FALL TIME:..... 5 ns TYP. 10 ns MAX. @ 0 dBm INPUT POWER WITH 50 Ω load
  20 ns MAX. @ -5 dBm INPUT POWER WITH 100 Ω LOAD (HIGH IMPEDANCE)
- DYNAMIC RANGE:..... -40 dBm TO +20 dBm
- CONNECTORS:..... SMA MALE (IN)/ SMA FEMALE (OUT)
- FINISH:..... PAINTED BLUE

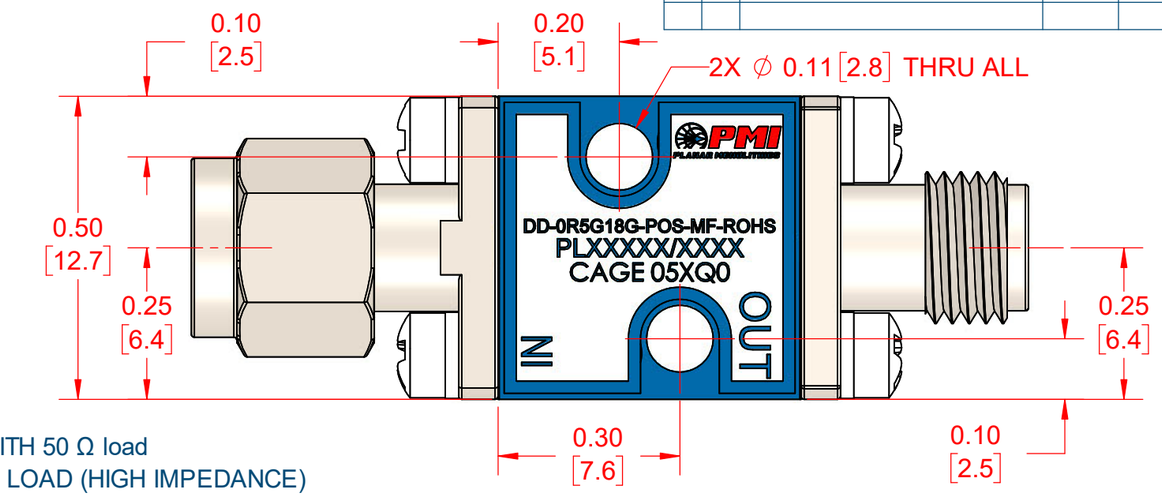
1. TSS MEASUREMENTS PERFORMED WITH LNA THAT HAS 20 dB GAIN AND 3 dB NOISE AT DIODE DETECTOR INPUT
2. PULSED MEASUREMENTS PERFORMED USING AN EXTERNAL 50 Ω TERMINATION (OR 100 Ω TERMINATION FOR HIGH IMPEDANCE) THROUGH A T-CONNECTOR FOR PROPER PULSE SHAPING. OUTPUT VOLTAGE MEASURED AT 50Ω OSCILLOSCOPE INPUT.

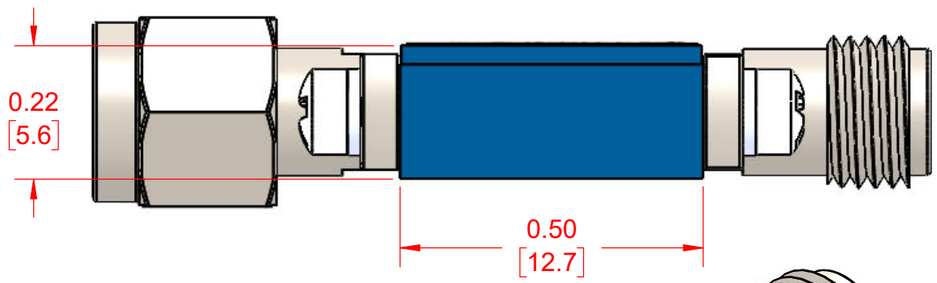


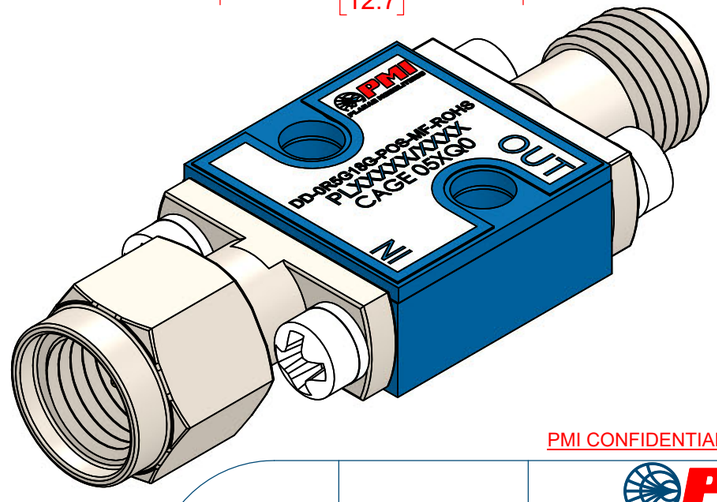
ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... -20°C TO +85°C (OPERATING)
  -65°C TO +125°C (STORAGE)
- HUMIDITY:..... MIL-STD-202, METHOD 103 COND. B
- SHOCK:..... MIL-STD-202, METHOD 213 COND. B
- VIBRATION:..... MIL-STD-202, METHOD 204 COND. B
- ALTITUDE:..... MIL-STD-202, METHOD 105 COND. B
- TEMPERATURE CYCLE:..... MIL-STD-202, METHOD 107 COND. A

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







PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS	DATE
DRAWN VP	3/13/2026
REDRAWN	
ISSUED	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS ± DECIMALS .XX ± 0.02 .XXX ± 0.01 ANGLES ±

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ISO 9001 CERTIFIED

TITLE: OUTLINE
DD-0R5G18G-POS-MF-ROHS

SIZE	FSCM NO.	DWG NO.	REV.
B	05XQ0	27054180	A1

SCALE 4:1 SHEET 1 OF 1