

DESCRIPTION:

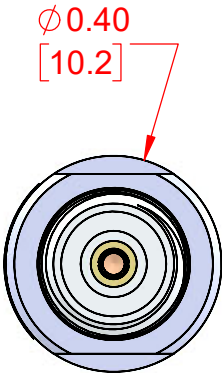
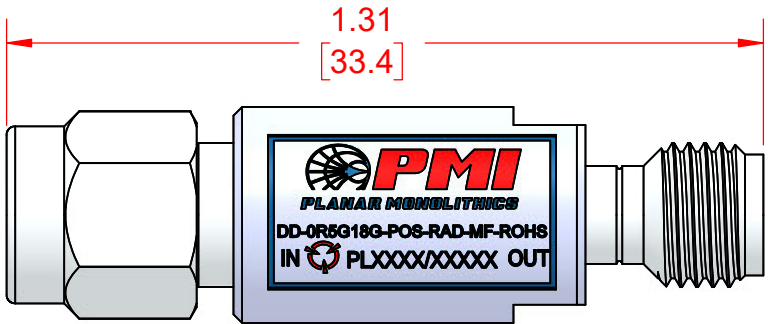
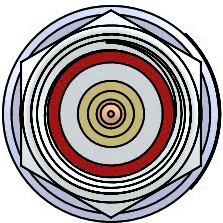
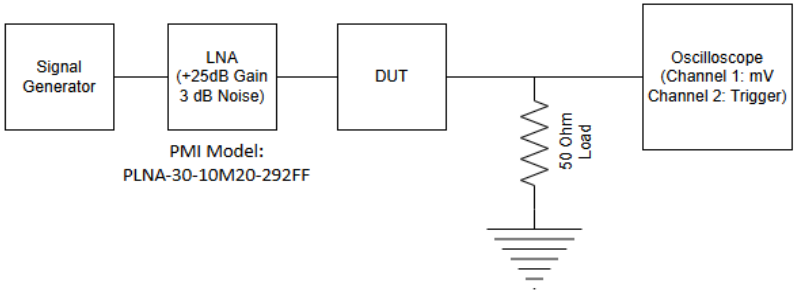
PMI MODEL NUMBER DD-0R5G18G-POS-RAD-MF-ROHS IS A 0.5 GHz TO 18.0 GHz, HIGH SPEED, HIGH SENSITIVITY DIODE DETECTOR REQUIRING NO BIAS AND OFFERING A RESPONSE TIME OF LESS THAN 20 ns.

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

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 SENSITIVITY¹:..... -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:..... 2.92mm MALE (IN)/ 2.92mm FEMALE (OUT)
- FINISH:..... ALBALOY PLATED

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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± 0.02 ± .XXX ± 0.01			 7309-A GROVE ROAD FREDERICK MARYLAND 21704 USA TEL: (301) 662-5019, FAX: (301) 662-1731 WEB: WWW.QUANTICPMI.COM, EMAIL: SALES@QUANTICPMI.COM ISO 9001 CERTIFIED			
	APPROVALS	DATE	TITLE OUTLINE DD-0R5G18G-POS-RAD-MF-ROHS			
	DRAWN VP	3/13/2026				
	REDRAWN		SIZE B FSCM NO. DWG NO. REV. 05XQ0 27054140 A1			
	ISSUED		SCALE 3:1		SHEET 1 OF 1	