

DESCRIPTION

PMI MODEL: A-2R7G3R1G-30G-R5N-13P-PN-L is an S-Band Low Noise Amplifier with integrated input limiter, 50-ohm matched input/output impedance, unconditionally stable over temperature and all load termination from open to short. The amplifier requires only single power supply, it is DC voltage regulated internally and reverse polarity protected.

SPECIFICATIONS

- FREQUENCY RANGE: 2.7 GHz TO 3.1 GHz
- GAIN: 29 ± 1 dB: TEMP. +10 TO +50°C.
- GAIN FLATNESS: WITHIN TOLERANCE
- NOISE FIGURE: 0.6 dB MAX. @ +25°C
- RETURN LOSS IN: 12 dB MIN.
- RETURN LOSS OUT: 16 dB MIN.
- OUTPUT P1dB: +13.0 dBm MIN.
- OUTPUT PSAT: +18.0 dBm MAX.
- INPUT OVERLOAD WITH AND WITHOUT DC POWER: +5.0 dBm CW
+30 dBm PEAK FOR 1 μS MAX.; PRT 1 mS.
+20 dBm PEAK FOR 250 μS; PRT 2 mS.
- DC POWER: +12V @ 125 mA, NOM.
- RESIDUAL PHASE NOISE: -115 dBc/HZ MAX. @ 100 HZ OFFSET
-135 dBc/HZ MAX. @ 10 KHZ OFFSET
-145 dBc/HZ MAX. @ 100 KHZ OFFSET
- OPERATING TEMP. RANGE: +10°C TO +50°C
- EXTENDED OPERATING TEMP.: +10°C TO +85°C (OUT OF SPEC.)
- STORAGE TEMP. RANGE MTBF: -35°C TO +90°C; >>500,000 HOURS, NAVAL SHELTERED
+30°C (BY SIMILARITY ONLY - MIL-HANDBOOK-217)
- CONNECTOR IN: SMA FEMALE, FIELD REPLACEABLE
- CONNECTOR OUT: SMA MALE, FIELD REPLACEABLE
- SEALING: UNIT HERMETICALLY LASER WELD SEALED
- FINISH: PAINT ALL SIDES EXCLUDING MOUNTING SURFACE EPOXY BLUE
MOUNTING SURFACE PLATE GOLD

ENVIRONMENTAL

- HUMIDITY: 100% UP TO +10°C
95% UP TO +35°C
75% UP TO +70°C
- SHOCK: ± 30G, 25 mS, HALF SINE
- VIBRATION: 5HZ TO 14 HZ ±1.25 MM
14HZ TO 23 HZ ±0.3 MM
23HZ TO 33 HZ ±0.125 MM
- AIR PRESSURE: 20000 TO 120000 PASCALS
SUDDEN AIR DEPRESSURIZATION OF 51000 PASCAL IS POSSIBLE

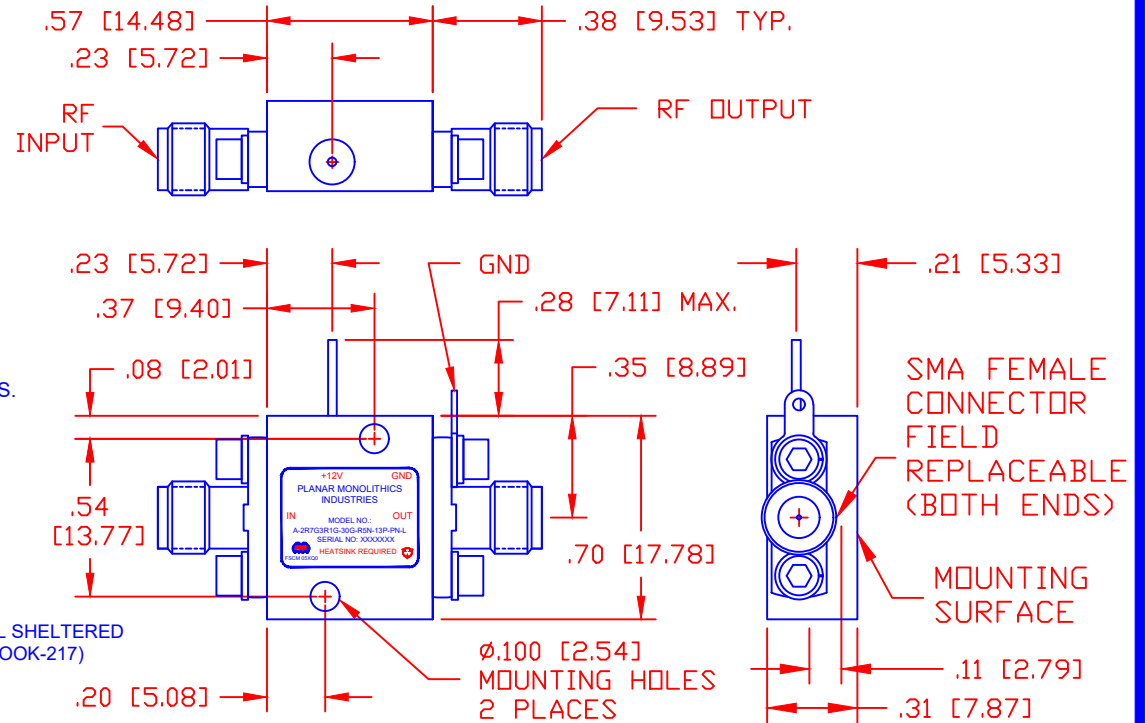
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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

PMI CONFIDENTIAL AND PROPRIETARY

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	-	9/18/2017	

MECHANICAL OUTLINE



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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			REV.
DRAWN	<i>HAF LAY</i>	09/18/17	PRODUCT FEATURE			-
CHECKED	<i>HAF LAY</i>	09/18/17	LOW NOISE AMPLIFIER: 2.7 GHz TO 3.1 GHz			-
ISSUED			A-2R7G3R1G-30G-R5N-13P-PN-L			-
SIZE	A	FSCM NO.	05XQ0	DWG NO.	-	
SCALE		N:S	SHEET		1 OF 1	