

## DESCRIPTION

PMI MODEL: A-1G18G-205N-13P-TC is a high performance, high intercept point, multi-octave wide bandwidth, 50-ohm matched, ultra low noise amplifier designed using state-of the art GaAs PHEMT devices. The amplifier is built using advance hybrid MIC techniques for reliability. Low input and output VSWR across the band allow the unit to be easily integrated into systems. The amplifier is built in a compact aluminum alloy housing with 4 mounting holes to facilitate balance mounting to improve contact for heat transfer between chassis and heat sink.

### Features:

- Low noise broadband operation
- Unconditionally stable over temperature
- Single positive power supply
- Internal DC regulated voltage
- Internal reverse polarity protection
- Field replaceable SMA connectors

### SPECIFICATIONS AT +25°C UNLESS OTHERWISE SPECIFIED

- Frequency Range: ----- 1.0 GHz to 18.0 GHz
- Gain: ----- 30 dB Min.
- Gain Flatness vs Frequency: ----- ±1.5 dB Max. Peak to Peak
- Noise Figure: ----- 2.5 dB Max..
- VSWR Input (DC-Coupled): ----- 2.0 : 1 Max.
- VSWR Input (AC-Coupled): ----- 2.5 : 1 Max.
- VSWR Output: ----- 2.0 : 1 Max.
- P1dB Out: ----- 13 dBm Min.
- IP3 Out: ----- 23 dBm Typ.
- IP2 Out: ----- 33 dBm Typ.
- Allowable Maximum Input Power: ----- 13 dBm Max.
- DC Power Supply: ----- +12V @ 200 mA Nom.
- Connectors (In/Out): ----- SMA Female
- Finish: ----- Gold Plated

### ENVIRONMENTAL RATINGS

- Temperature: ----- -40 °C to +85 °C (Operating)  
-54 °C to +95 °C (Non-Operating)
- HUMIDITY: ----- RH 45 to 85% Max.

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE

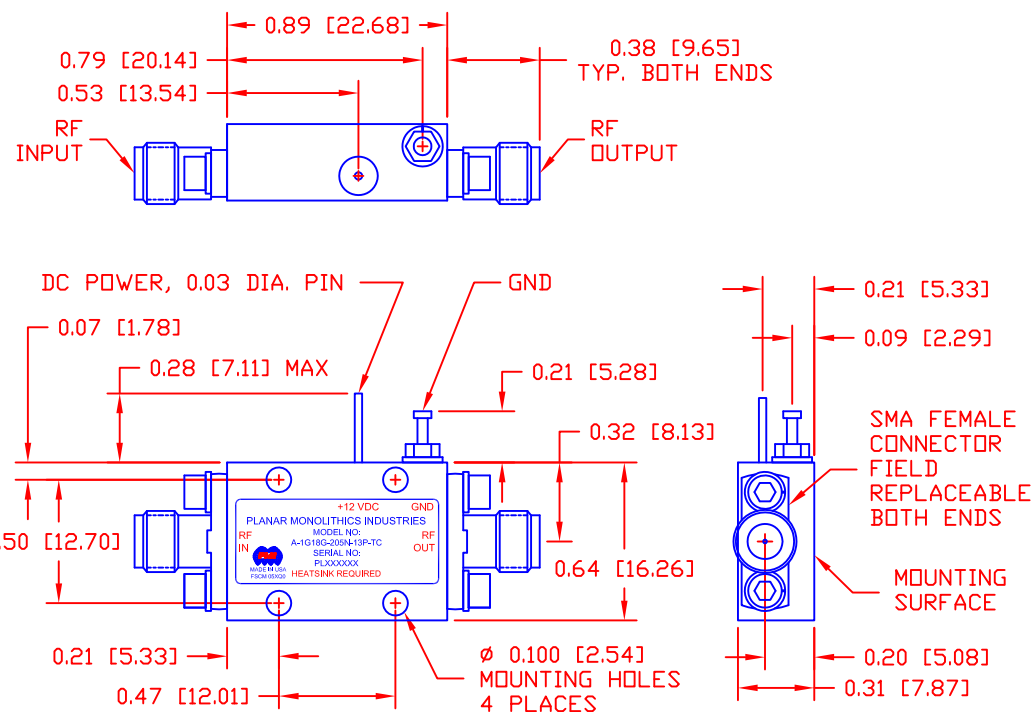
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS  
ARE IN INCHES (mm)  
TOLERANCES (INCHES):  
X.XX ±0.010  
X.XXX ±0.005

**PMI CONFIDENTIAL AND PROPRIETARY**

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	9/22/2017	HAI SAY

## MECHANICAL OUTLINE



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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			REV.
DRAWN	HAI SAY	07/14/17	PRODUCT FEATURE			-
CHECKED	HAI SAY	07/14/17	LOW NOISE AMPLIFIER: 1.0 TO 18.0 GHz			
REDRAWN	EMF	9/22/17	A-1G18G-205N-13P-TC			
SIZE	FSCM NO.	DWG NO.	PRELIMINARY			
A	05XQ0					
SCALE N:S			SHEET 1 OF 1			