Coaxial

Broadband Medium Power Amplifier (MPA) MPA6G18G

Case PN: 6UDD2W6S1A2

50Ω (match on input & output) Broadband 6G to 18G Hz

Features:

- *** Frequency Range: 6GHz to 18GHz;**
- *** Noise Figure: typical 4.5dB @ 10 GHz**
- *** Gain: typical 14 dB**
- *** Output P1dB: 20 dBm typ.**
- *** Output IP3: 32 dBm typ.**
- *** DC Voltage: +5V**
- *** Operating Current: 90mA**
- *** Stainless Steel SMA Female Connector**
- *** High Quality Isola-Tera RF PCB**
  (very low loss and high thermal performance)
- *** ROHS Compliant**

Applications:

- *** Test Instrumentation**
- *** Wideband A/D System**
- *** General Purpose Wireless**
- *** Radar & VSAT**
- *** SDR & Ham Radio**

General Description:

MPA6G18G is a broadband, efficient GaAs median power amplifier with 14 dB typical gain from 6 to 18 GHz in a small 15/16”x15/16”x0.59” shielded RF enclosure (PN: 6UDD2W6S1A2). It has +21.5 dBm of saturated power and 27% PAE from single +5 Power supply. Third order linearity (OIP3) is typically 28 dBm. The I/Os are DC blocked.

Electrical Specifications:

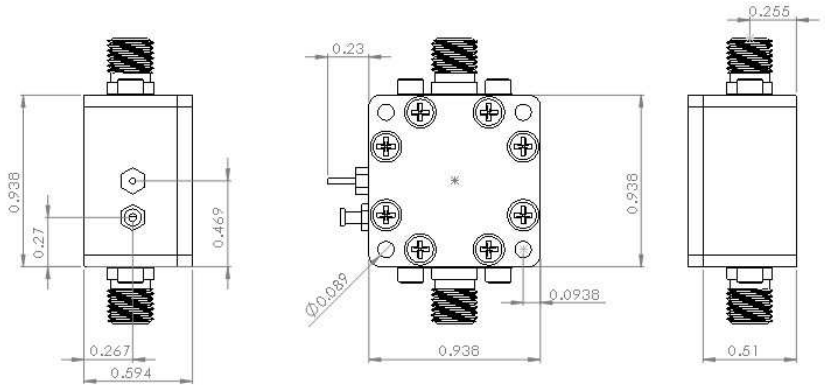
Item	Parameter	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Units
1	Operational Freq.	6.0 – 8.5			8.5 – 14			14.0 – 18.0			GHz
2	Gain	10	14	19	13	17	21	10	14	19	dB
3	Input Return Loss		10			13			20		dB
4	Output Return Loss		12			15			14		dB
5	Noise Figure		4.6	6	4.5	6		4.5	6		dB
6	Output P1dB	16	19		17	20		17	20		dBm
7	Output IP3	28	30		29	32		29	32		dBm
8	Current, I_{DD}		90	115		90	115		90	115	mA

Test Conditions: V_{DD}=+5V, Temp = +25 °C, 50Ω system.

Absolute Maximum Ratings

Item	Parameter	Rating	UNITS
1	Max Device Voltage	+6	V
2	Max RF input Power	+15	dBm
3	Operating Temperature	-40 to +85	°C
4	Max Storage Temperature	-65 to +150	°C

Outline Drawing (inch)



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