

## 50Ω (match on input &amp; output) Broadband 5G to 18G Hz

Case PN: 6UDD2W6S1A2

## Features:

- \* Frequency Range: 5GHz to 18GHz;
- \* Noise Figure: typical 7.0dB @ 10 GHz
- \* Gain: typical 18 dB @ 10 GHz
- \* Output P1dB: 19.5 dBm typ.
- \* Output IP3: 28 dBm typ.
- \* DC Voltage: +5V
- \* Operating Current: 120mA
- \* Stainless Steel SMA Female Connector
- \* High Quality Isola-Tera RF PCB  
(very low loss and high thermal performance)
- \* ROHS Compliant

## General Description:

MPA5G18G is a broadband, median power amplifier with 18 dB typical gain from 5 to 18 GHz in a small 15/16"x15/16"x0.59" shielded RF enclosure (PN: 6UDD2W6S1A2). Third order linearity (OIP3) is typically 28 dBm.

## Electrical Specifications:

Item	Parameter	Min	Typ	Max	Min	Typ	Max	Units
1	Operational Freq.		5 - 14			15 - 18		GHz
2	Gain	15	18		12.5	14		dB
3	Input Return Loss		13			13		dB
4	Output Return Loss		12			8		dB
5	Noise Figure		7			7		dB
6	Output P1dB	16.5	19.5		16	19		dBm
7	Output IP3		28			25		dBm
8	Current, I <sub>DD</sub>		120	150		120	150	mA

Test Conditions: V<sub>DD</sub>=+5V, Temp = +25 °C, 50Ω system.

## Absolute Maximum Ratings

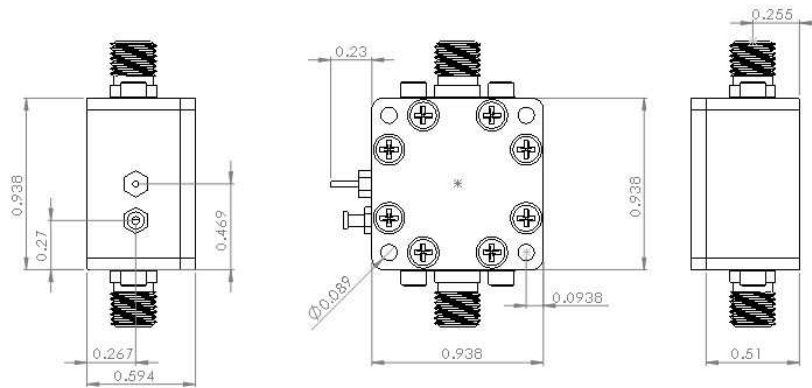
Item	Parameter	Rating	UNITS
1	Max Device Voltage	+5.5	V
2	Max RF input Power	+10	dBm
3	Operating Temperature	-40 to +85	°C
4	Max Storage Temperature	-65 to +150	°C

## Applications:

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

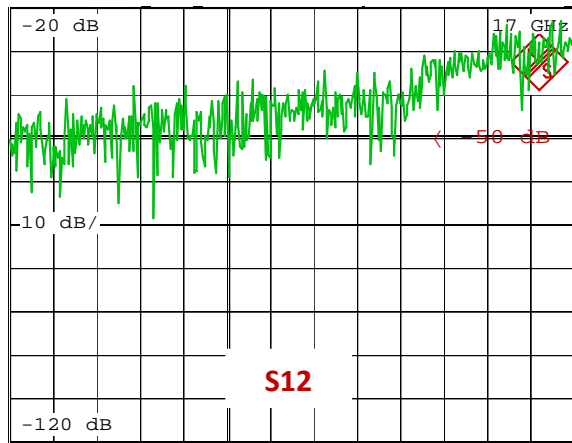
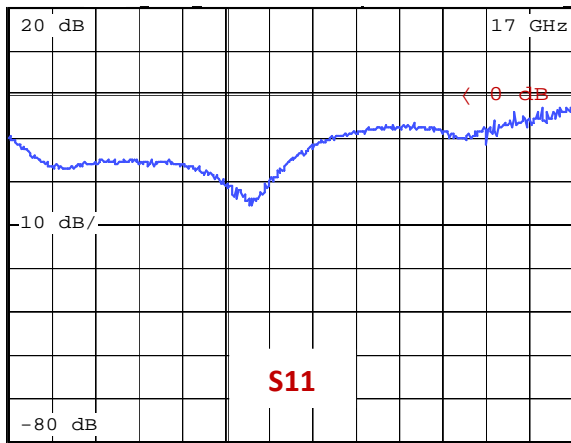


Outline Drawing (inch)



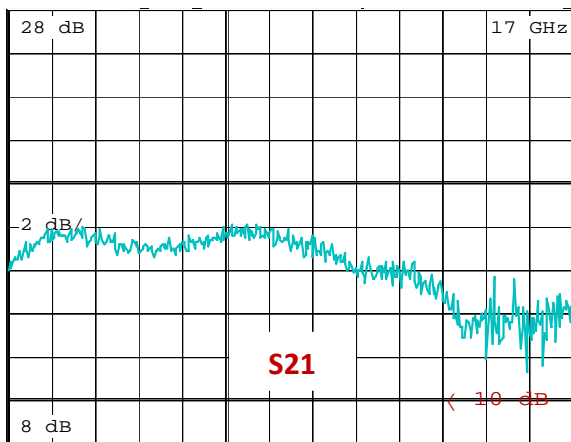
S-Parameters

S11 MAG 10 dB/

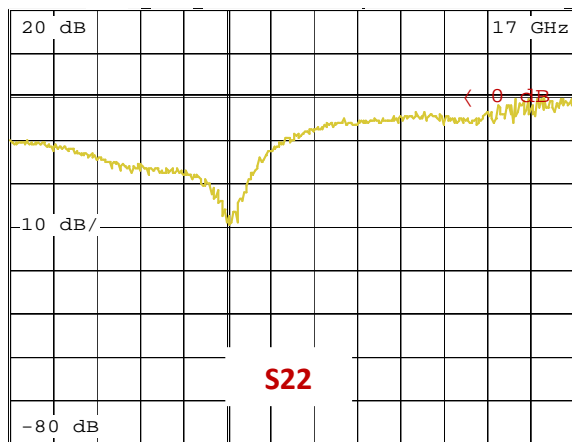


CAI

S21 MAG 2 dB/ REF 10 dB



S22 MAG 10 dB/ REF 0 dB



CPL

FIL 10k

START 5 GHz

1 GHz/

STOP 18 GHz

