Case PN: 6UDL6W6O5A2

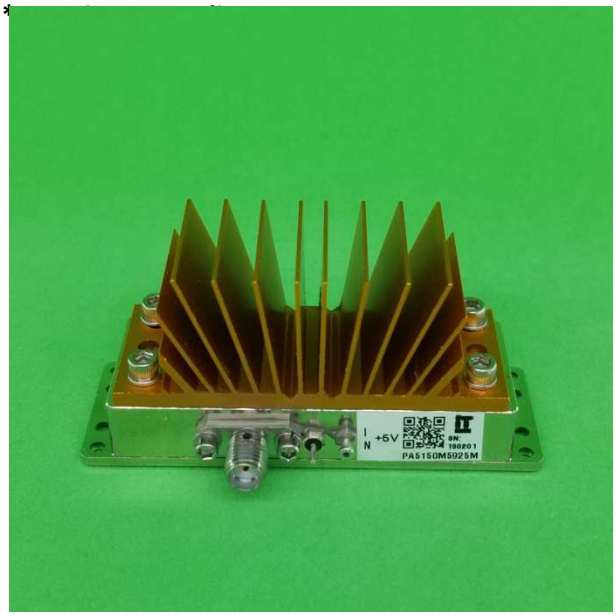
High Efficiency 4W Power Amplifier 5150M to 5925MHz

Features:

- *** High Efficiency: PAE=25% @+28dBm**
- *** Gain @+28dBm output power: 33 dB**
- *** Excellent input and output return loss: to 50 Ω system**
- *** Integrated active bias: temperature compensated**
- *** Single DC Voltage: +5V**
- *** Stainless Steel SMA Female Connector**
- *** High Quality Rogers RO4350 RF PCB**
- *** ROHS Compliant**

Applications:

- *** LTE Applications**
- *** Wideband A/D System**
- *** General Purpose Wireless**
- *** Driver Amplifier for base station**



General Description:

PA5150M5925M is a high efficiency fully input/output matched power amplifier (PA) with high gain and linearity. The compact 0.938"x2.813"x1.35" (including heatsink and mounting bracket) makes this 4W PA one of smallest in the market. This PA is designed for the unlicensed spectrum, LTE-advanced small cell base stations operating from 5150 to 5925MHz. The active biasing circuitry is integrated to compensate PA performance over temperature and voltage. The PA has high thermal performance heatsink for optimum operation.

Electrical Specifications:

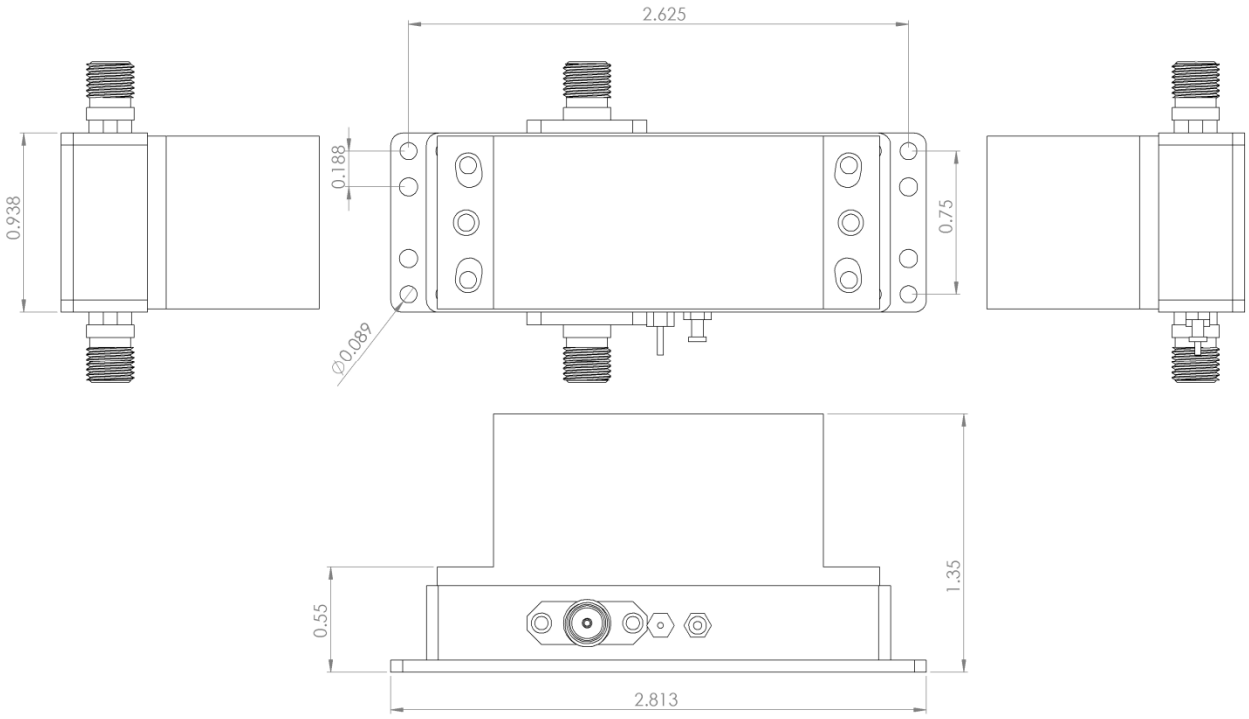
Item	Parameter	Symbol	Test Condition	Min	Typ	Max	Units
1	Small signal gain	$\|S_{21}\|$	Pin = -30 dBm	28	30	35	GHz
2	Gain @+28 dBm	Gain@+28dBm	Pout =+28 dBm	29	33		dB
3	Input Return Loss	$\|S_{11}\|$	Pin =-30 dBm	6.5	8	10	dB
4	Output Return Loss	$\|S_{22}\|$	Pin =-30 dBm	8	9	12	dB
5	Reverse isolation	$\|S_{12}\|$	Pin =-30 dBm		50		dB
6	Saturated output power	P_{SAT}	CW, Pin = 8 dBm		+36		dB
7	Output Power at 3dB Gain compression	P3dB	CW, Pin = -30 dBm	+34	+35		dBm
8	Power-added efficiency	PAE	CW, Pout = +28 dBm	22	25		%
9	Quiescent Current	Icc	No RF signal		95		mA

Test Conditions: V_{DD}=+5V, Temp = +25 °C,f=5200 MHz.

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	^{o}C
4	Max Storage Temperature	-55 to +125	^{o}C
5	Power dissipation	2.2	w

Outline Drawing (inch)



S-Parameters (0 dBm input)