

## TWA Series

## 4.5-6.0GHz 8W Power Amplifier

### Features

- Frequency Range: 4.5 – 6.0GHz
- Gain: 41dB
- P<sub>OUT</sub>: +39dBm
- IP3: +48dBm
- Noise Figure: 5dB
- DC Power: 12V @ 4700mA
- RF Connector: SMA-F

### Photo



### Description

TWA-4560 is an 8W high performance RF Power Amplifier, with standard frequency range of 4.5 to 6.0GHz.

### Electrical Specifications @+25 °C, Z<sub>in</sub>=Z<sub>out</sub>=50 Ω, V<sub>supply</sub> = +12VDC

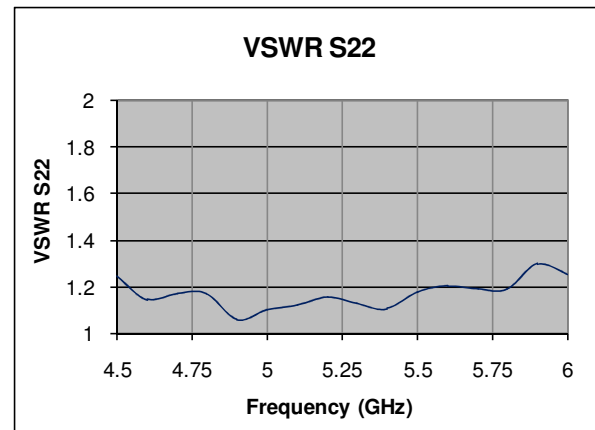
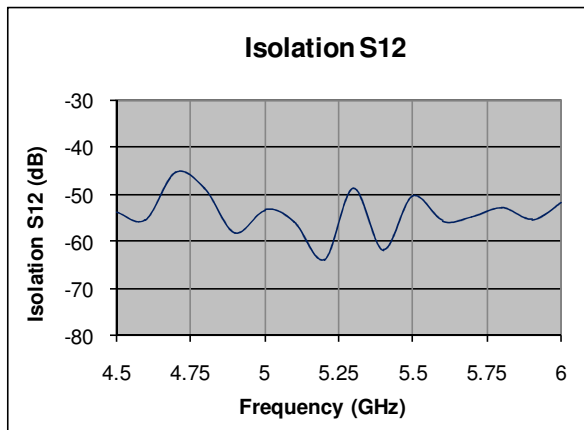
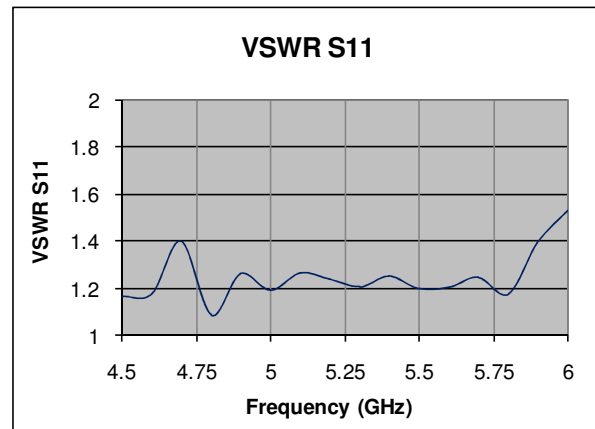
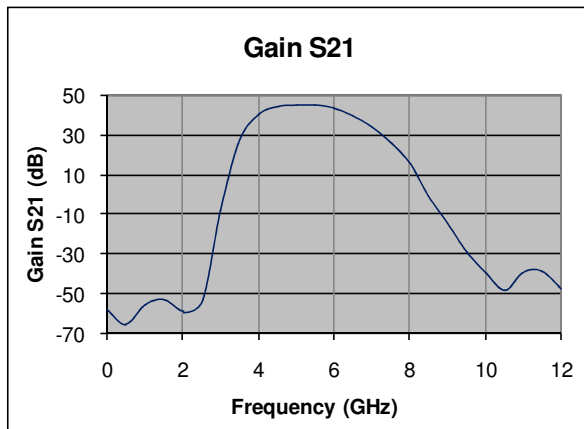
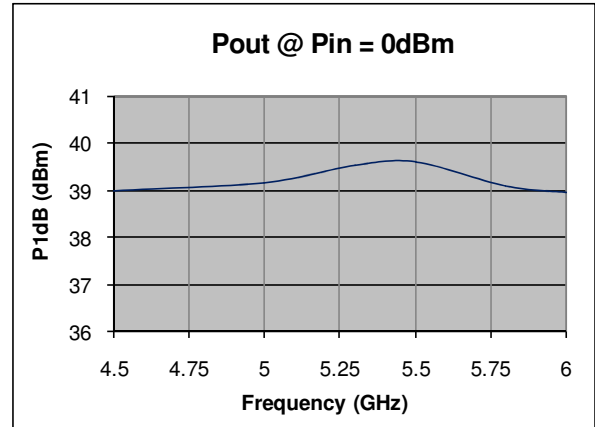
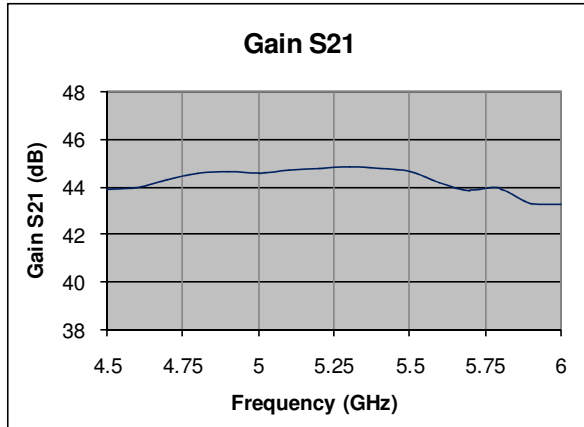
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	4.5		6.0
Gain (S21)	dB	41	43	
Gain Flatness	dB		±0.8	±1.2
Output Power P <sub>OUT</sub> @ P <sub>IN</sub> = 0dBm	dBm		+39	
Output Third Order Intercept IP3	dBm		+48	
Noise Figure	dB		5	6
Isolation (S12)	dB		-45	
VSWR-Input (S11)	ratio		1.5:1	2.0:1
VSWR-Output (S22)	(unitless)		1.3:1	2.0:1
DC Power Supply - voltage	V		12	
DC Power Supply - current	mA		4700	
Operating Temperature	°C	-40		+85
Size (RF/DC feedthru's excluded)	Inch/mm	2.96 x 2.35 x 0.63/73.66 x 59.69 x 16.00(LxWxH)		
Weight	Oz	5.4 (153 grams)		

**WARNING: MUST USE ADEQUATE HEAT SINK TO MAINTAIN AMPLIFIER CASE TEMPERATURE UNDER +85 °C**

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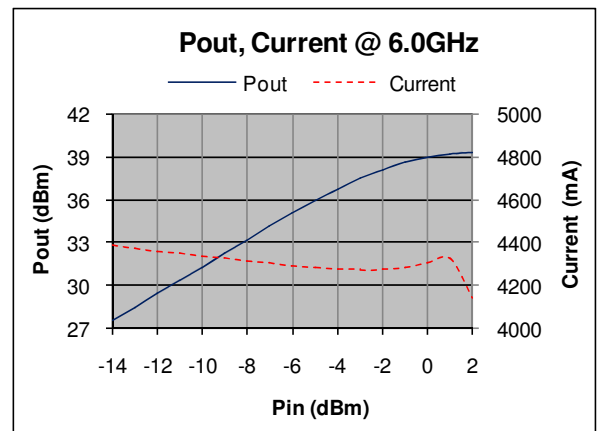
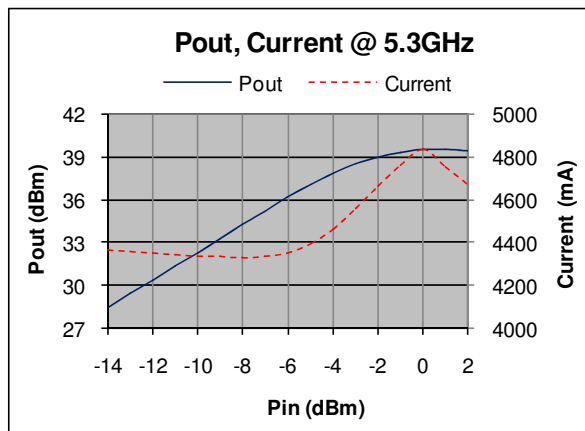
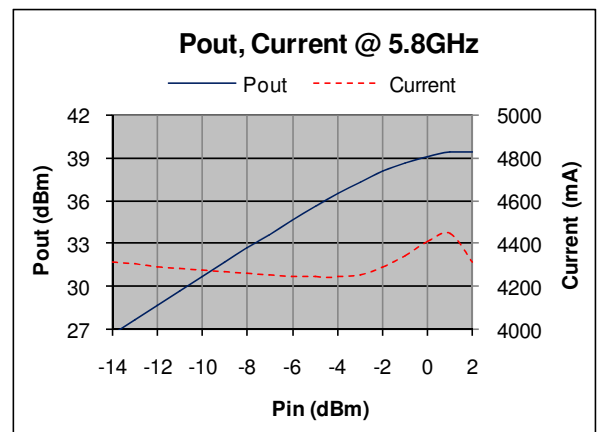
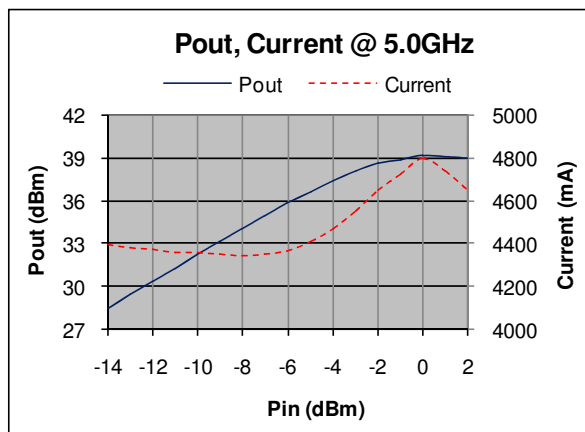
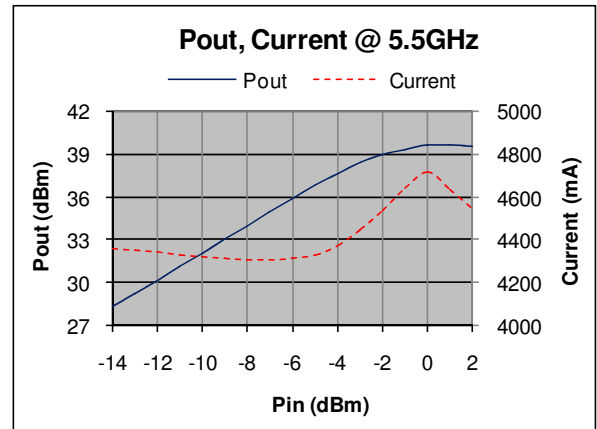
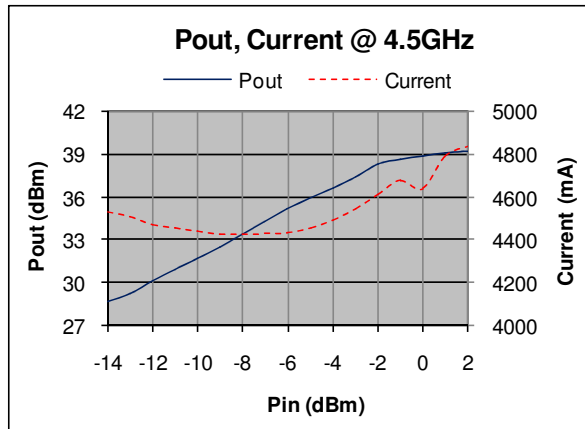
**Typical Performance @ +25 °C**



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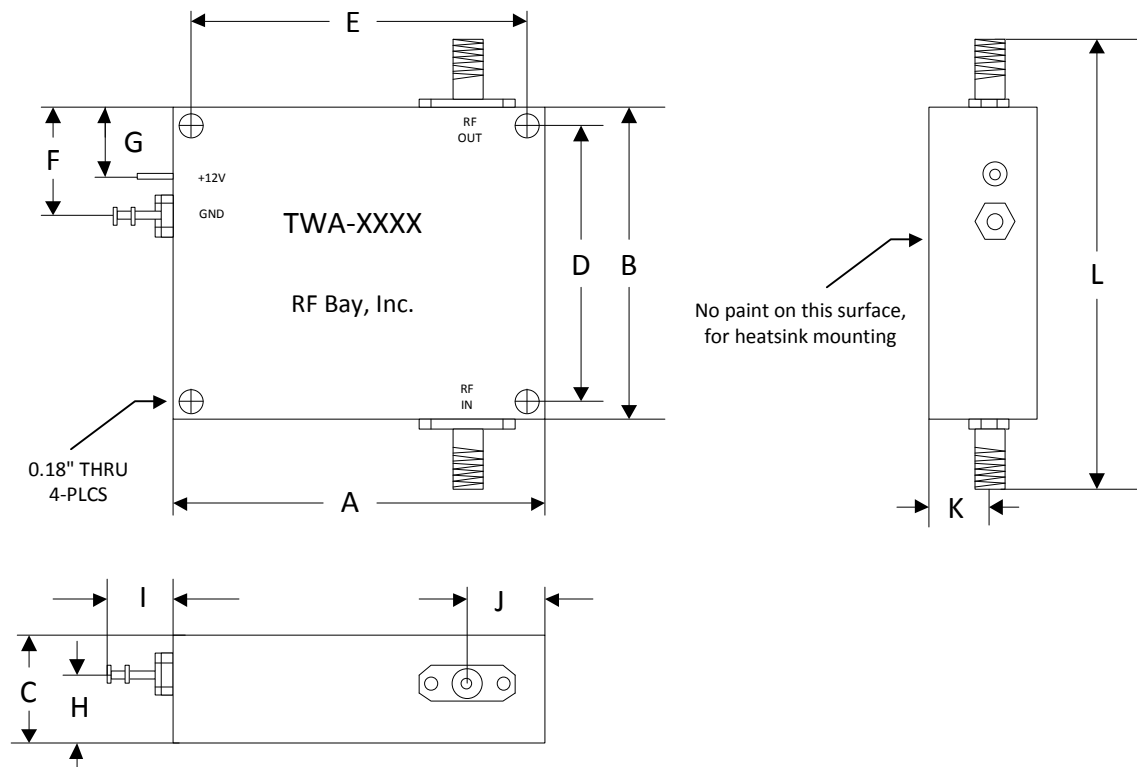
**Typical Performance @ +25 °C**



### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+20dBm
Supply Voltage (Survival)	+13V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

### Outline



	A	B	C	D	E	F	G	H	I
Inch	2.900	2.350	0.630	2.010	2.670	0.750	0.500	0.360	0.400
mm	73.66	59.69	16.00	51.05	67.82	19.05	12.70	9.144	10.16
	J	K	L						
Inch	0.560	0.330	3.100						
mm	14.22	8.38	78.74						