

RF AMPLIFIER

MODEL *TM3045*

Available as: TM3045, 4 Pin TO-8 (T4)
 TN3045, 4 Pin Surface Mount (SM3)
 FP3045, 4 Pin Flatpack (FP4)
 BX3045, Connectorized Housing (H1)

Features

- Low Noise Figure: 2 dB Typical
- Medium Gain: 15 dB Typical
- Operating Temp. - 40 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -40 °C to +85 °C
Frequency	5 - 125 MHz	5 - 125 MHz
Gain (dB)	15	14 Min.
Power @ 1 dB Comp. (dBm)	+16	+14 Min.
Reverse Isolation (dB)	-18	-17 Max.
VSWR In	1.35:1	2.0:1 Max.
Out	1.35:1	2.0:1 Max.
Noise Figure (dB)	2.0	2.5 Max.
Power Vdc	+12	+12
mA	29	32 Max.

Note: Care should always be taken to effectively ground the case of each unit.

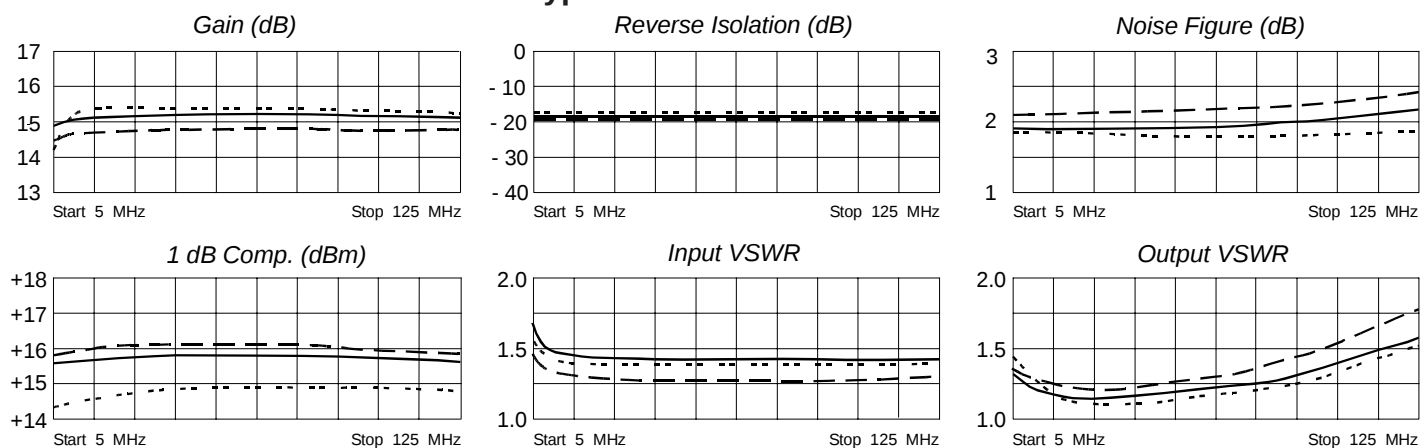
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +44 dBm (Typ.)
 Second Order Two Tone Intercept Point +39 dBm (Typ.)
 Third Order Two Tone Intercept Point +29 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 15 Volts
 Continuous RF Input Power + 13 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

Typical Performance Data



Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.23	-16	5.61	-161	.12	-169	.16	-91
25	.18	-3	5.78	178	.12	176	.06	176
50	.18	3	5.76	170	.12	166	.09	127
75	.19	7	5.73	164	.12	160	.12	103
100	.20	9	5.72	159	.13	153	.15	88
125	.22	9	5.73	153	.13	146	.18	76



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