RF Amplifier
High Output Power: +25.5 dBm

Model TM3036
25 to 110 MHz

Features
- High Output Power: +25.5 dBm Typical
- Low Noise Figure: 2.5 dB Typical
- Operating Temp. - 55 ºC to +85 ºC
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	25 - 110 MHz	25 - 110 MHz
Gain (dB)	20.5	20.0 Min.
Power @ 1 dB Comp. (dBm)	+25.5	+24.0 Min.
Reverse Isolation (dB)	-25	-24 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	2.5	3.5 Max.
VSWR Vdc	+15	+15
mA	102	115 Max.

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

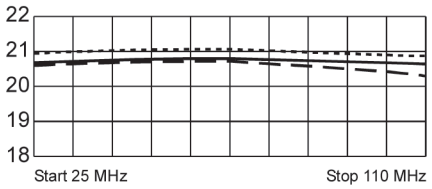
Typical Intermodulation Performance at 25 º C
Second Order Harmonic Intercept Point.... +55 dBm (Typ.)
Second Order Two Tone Intercept Point.... +50 dBm (Typ.)
Third Order Two Tone Intercept Point..... +40 dBm (Typ.)

Maximum Ratings
Ambient Operating Temperature ..... -55ºC to + 100 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 125 ºC
DC Voltage ..... + 18 Volts
Continuous RF Input Power ..... + 18 dBm
Short Term RF Input Power.....100 Milliwatts (1 Minute Max.)
Maximum Peak Power..... 0.3 Watt (3 μsec Max.)

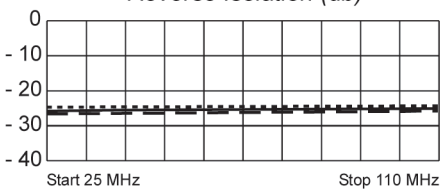
Packaging Options (see Appendix)
TM3036, 4 Pin TO-8 (T4)
TN3036, 4 Pin Surface Mount (SM3)
FP3036, 4 Pin Flatpack (FP4)
BX3036, Connectorized Housing (H1)

Typical Performance Data

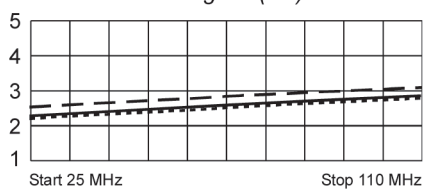
Gain (dB)



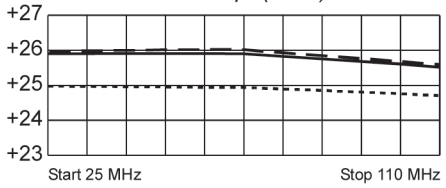
Reverse Isolation (db)



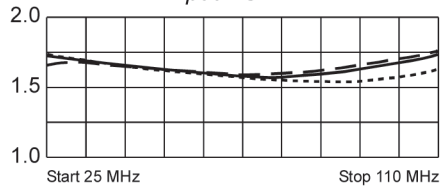
Noise Figure (dB)



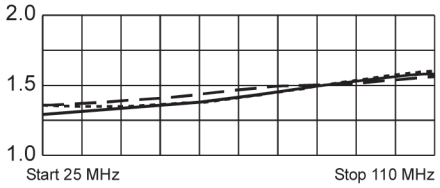
1 dB Comp. (dBm)



Input VSWR



Output VSWR



Legend ——— *+ 25 ºC* – – – *+ 85 ºC* - - - - - - *-55 ºC*

Linear S-Parameters

Freq. MHz	----S11---- Mag	Deg	----S21---- Mag	Deg	----S12---- Mag	Deg	----S22---- Mag	Deg
30	.26	-28	10.85	169	.0499	168	.13	-20
50	.25	-40	10.85	156	.0494	154	.14	-21
70	.22	-56	10.91	144	.0547	140	.16	-26
90	.19	-78	10.85	132	.0554	125	.18	-37
110	.17	-106	10.85	119	.0580	113	.21	-51