

10W HF Ultra Linear Power Amplifier

LA 01-545

The LA01-545-GMS Amplifier has been specifically developed for high Intercept performance in the RF power range of 1-10W. Careful choice of components, has provided the user with high MTBF and offers in excess of 80,000Hrs MTBF when calculated using MIL-HNDBK-217F. The amplifier is housed in a rugged machined aluminium box. The box is flanged to allow mounting to a heat-sink.



Specification:

Parameter	Limits
Frequency Range	5Mhz to 45MHz
Power Output	10W min CW
Gain (5-40Mhz)	40 +/-1dB
Gain (40-45MHz)	39 +/-1dB
Input Impedance	50 Ohms
Output Impedance	50 Ohms
Input return Loss	>10dB (VSWR Better than 2:1)
Output Return Loss	>10dB (VSWR Better than 2:1)
Noise Figure	<11dB Harmonic Distortion @ 3.2W 10MHz
Second Harmonic	<-48dBc
Third Harmonic	<-32dBc
Third order Intercept Point (Output)	>+52dBm (Two tone test 1W/Tone)
Output Protection (10W)	Operates into any load with no damage
Operating Case Temp	+5 Deg. C to +50 Deg C.
M.T.B.F.	>80,000Hrs
DC Supply	24V @ max of 4A for 10W CW.
Input and Output Connectors	SMA
Case Size	5" x 3" x 1" (Excluding Flange)

Notes::

- 1/Standing current, no signal is approx 2.3A.
- 2/Max current is 4A at 10W output, typically 3.6A.
- 3/THE HOUSING REQUIRES A HEATSINK