



communications

Electron Devices

L5844 Traveling Wave Tube

Features

- 9.7 to 9.9 GHz Frequency Band
- 20 KW Minimum Peak Power
- 60 dB Minimum Saturated Gain
- High Efficiency (2 Stage Collector)
- 1.5% Duty
- Air Cooled



Typical Performance

RF Peak Power Output	20 kW min.
Duty	1.5%
RF Drive Power Input	10 dBm
Frequency	9.7 to 9.9 GHz
Saturated Gain	60 dB

Mechanical

Mounting Position	Any
Weight	11 lbs max.
Dimensions	See Outline Dwg.

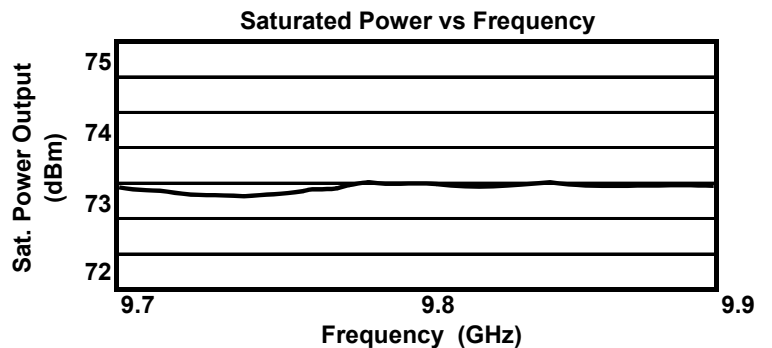
Typical Operating Parameters

Cathode Voltage	-23 KV
Peak Cathode Current	4.5 A
Collector Voltage No.1	12.5 KV
Collector Voltage No.2	15.5 KV
Peak Body Current (with RF)	1.0 A
Grid Bias	-275 V
Peak Grid Drive	+300 V
Heater Voltage	-11.0 V
Heater Current	3.6 A
Air Cooling @ 30°C Inlet	2 lbs/minute
Gun Insulation	None

All voltages are with respect to cathode

The L5844 Coupled Cavity TWT provides a minimum pulsed power output of 20 KW over a frequency range of 9.7 to 9.9 GHz. It has a typical saturated gain of 60 dB over a 2.4% bandwidth and is suitable for use in airborne radar systems.

The tube is air cooled and operates at a duty cycle of 1.5% for a minimum average power output of 300 watts. It has a shadow gridded gun and a depressed collector. The tube is PPM focused with samarium cobalt magnets.. DS58441203



Cleared by DoD/DFOISR for public release under 04-S-0490 2/3/04