



LITTON INDUSTRIES

ELECTRON TUBE DIVISION

960 INDUSTRIAL ROAD • SAN CARLOS, CALIFORNIA • LYTELL 1-8411

L-5083 TRAVELING WAVE TUBE

TENTATIVE SPECIFICATION

The L-5083 is a broadband traveling wave amplifier having a minimum power output of 20 watts over the frequency range of 4,000 to 8,000 Mc. The tube has a metal-ceramic vacuum envelope and utilizes periodic permanent magnet focusing.

TYPICAL OPERATING CONDITIONS

Duty	CW
Cathode Voltage	3000 Vdc (Neg.)
Cathode Current	80 mA
Anode Voltage	Ground potential
Helix Voltage	Ground potential (Can be modulated)
Collector Voltage	Ground potential
Grid Voltage (With respect to cathode)	65 V (Pos.)
Filament Voltage	6.3 V
Filament Current	1.2 A

PERFORMANCE CHARACTERISTICS

Frequency Range	4,000 to 8,000 Mc
Power Output	Min. 20 W
Small Signal Gain	Min. 33 db

MAXIMUM RATINGS

Duty	CW
Cathode Voltage (Range)	2800 to 3200 Vdc
Cathode Current	100 mA
Grid Voltage (With respect to cathode)	100 V
Helix Current	10 mA
Collector Temperature	125°C

MECHANICAL DESCRIPTION

Dimensions	See Outline Drawing
Weight	3.5 lbs.
Cooling	Conduction and Forced Air
Mounting Position	Any

L-5083 Traveling Wave Tube Tentative Specification (cont'd)

ENVIRONMENTAL CAPABILITY

Shock	30 G
Vibration	10 G
Ambient Temperature	-54°C to +85°C
Altitude	Any