



Travelling Wave Tube

Type LY130



Description

The LY130 is rated at 5kW minimum peak power output, 60dB gain, 3% duty ratio at pulse lengths up to 40µs, and is characterised by a flat gain response across the operating bandwidth. The compact, rugged tube is of a metal ceramic construction and weighs 2.5kg (approx).

Features

The LY130 is a medium power I Band TWT intended for radar applications. The tube incorporates:

- Low Voltage Beam Switching Grid
- Ring Loop Circuits
- PPM Focusing
- Depressed Collector Operation
- Conduction Cooling

Specification

Electrical

Frequency Range	9GHz - 10GHz
Output Power	5kW Peak (min)
Duty Ratio	3%
Gain	60dB
Load VSWR	1.5:1
Source VSWR	1.5:1
Gain Flatness Over the Frequency Range	1dB
Harmonic output	-20dBc
Heater Voltage	6.3V
Heater Power	18W

Phase Sensitivity

Cathode	0.5°/V
Grid	4.5°/V
AM/PM	8°/dB

Electrode Voltages WRT Cathode (Typical)

Grid Bias	-250V
Grid Pulse	200V
Grid Pulse Voltage (wrt cathode)	200V
Slow Wave Structure	14.5kV
Collector	11.0kV

Electrode Pulse Currents (Typical)

Grid	10mA
Slow Wave Structure	0.5A
Cathode	2.1A

Physical

Baseplate Temperature Range	-20°C to +80°C
Input Connector	SMA
Output Connector	UG40A/U Waveguide Flange
Overall Dimensions (approx)	346.7mm x 63.5mm x 83.2mm
Weight (approx)	2.5kg

Albacom Limited reserve the right to alter any product specifications without prior notice.