

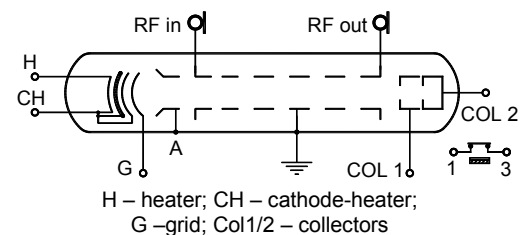
Traveling Wave Tube LO-500

Features

Frequency range	4,4 to 5.0 GHz
RF cw output power	400 W
Gain	30 dB

Description

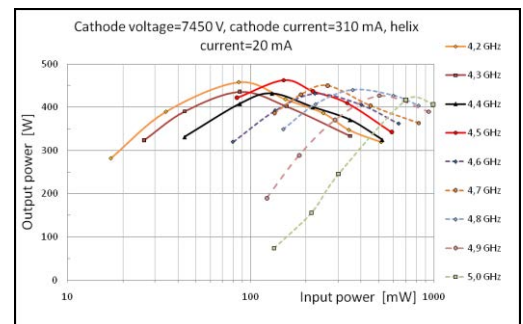
The LO-500 is a helix, grid-controlled, conduction cooled traveling wave tube for use in advanced telecommunication systems and test equipment. Each tube delivers at least 400 W RF continuous power in C band. The tube has a metal-ceramic vacuum envelope, two-stage depressed collector and periodic permanent magnet focusing structure. Temperature-rise limit of collectors TWT is checked by normal close thermostat.



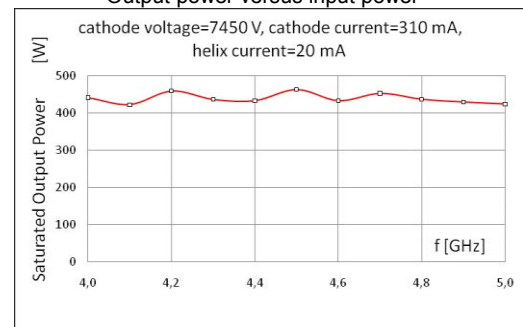
RF Performance Requirements

TECHNICAL DATA	MIN	MAX	UNITS
Frequency range	4.4	5.0	GHz
RF output power	400	-	W
Gain	30	-	dB
RF drive power	-	1.0	W
Load VSWR	max 2:1		

Charts



Output power versus input power



Saturated output power versus frequency

Electrical Requirements

TECHNICAL DATA	MIN	MAX	UNITS
Cathode voltage	-7.0	-9.0	kV
Collector #1 voltage	75 % cathode voltage		
Collector #2 voltage	50-60 % cathode voltage		
Grid-bias voltage	-600	-500	V
Grid pulse voltage	+50	+100	V
Cathode pulse current	-	350	mA
Helix current	-	25	mA
Heater voltage	6,0	7.0	V
Heater current	1,3	2,0	A
Heater warm-up time	3	-	min

Notes

- The cathode voltage is measured with respect to the ground.
- The heater, grid and collectors voltages are measured with respect to the cathode.

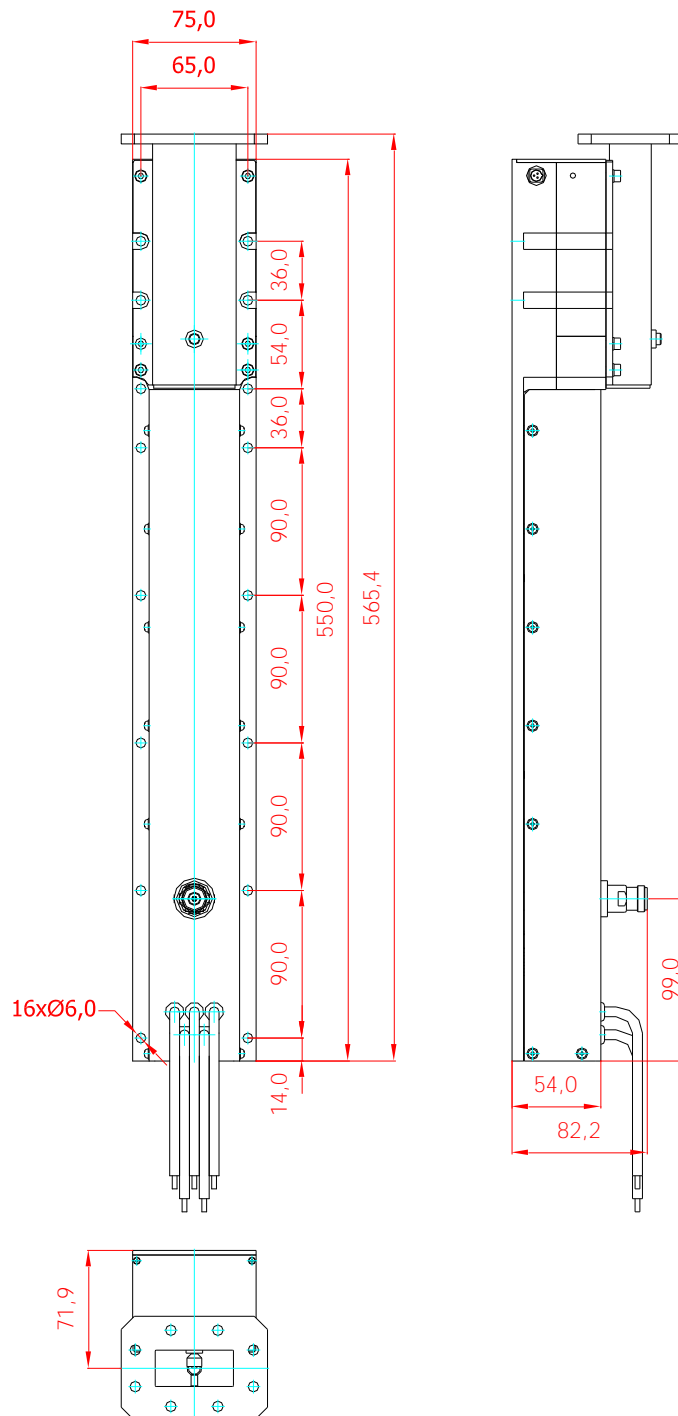
Technical Description

Dimensions	See Outline Drawing
Weight	Max. 5 kg
Mounting Position	Any
RF input connector	N 50
RF output connector	WR 189
Thermostat connector	Binder 719

PIT - RADWAR S.A.
WROCLAW DIVISION

50-425 Wrocław, ul. Krakowska 64, Poland; tel. (+48) 71-342-65-54; fax (+48) 71-342-58-59; e-mail: sales@dolam.pl
53-439 Wrocław, ul. Grabiszyńska 97 tel. (+48) 71-361-18-19 ; fax. (+48) 71-361-73-19; e-mail: office@pitow.wroc.pl

Traveling Wave Tube LO-500



The mechanical dimensions can be modified. Current detailed outline drawing are available on request.
All mechanical dimensions are in [mm].

PIT - RADWAR S.A.
WROCLAW DIVISION

50-425 Wrocław, ul. Krakowska 64, Poland; tel. (+48) 71-342-65-54; fax (+48) 71-342-58-59; e-mail: sales@dolam.pl
53-439 Wrocław, ul. Grabiszyńska 97 tel. (+48) 71-361-18-19 ; fax. (+48) 71-361-73-19; e-mail: office@pitow.wroc.pl