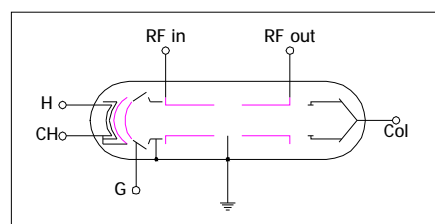
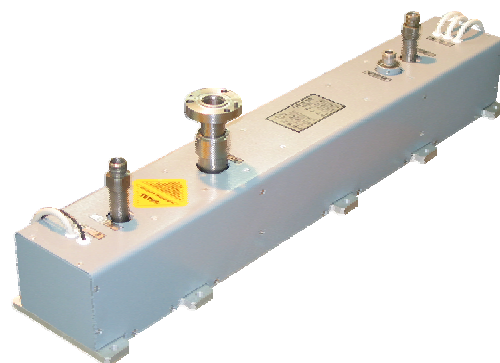


Features

Frequency range	5,4 to 5,9 GHz
RF peak output power	10 kW
RF average output power	500 W
Gain	35 dB
Duty cycle	5 %

Description

The LO-550 is a helix, grid-pulsed and liquid cooled traveling wave tube for use as a driver or output tube in advanced radar system and test equipment. Each tube delivers at least 9 kW of RF peak power and minimum 450 W of average output power in L band without adjustment. The tube has a metal-ceramic vacuum envelope, single-stage depressed collector and periodic permanent magnet focusing structure.



H – heater; CH – cathode-heater;
G –grid; Col –Collector

RF Performance Requirements

TECHNICAL DATA	MIN	MAX	UNITS
Frequency range	5,4	5,9	GHz
RF peak output power	10		kW
RF average output power	500	-	W
Gain	35	-	dB
RF drive power	-	5	W
Load VSWR	max 2:1		

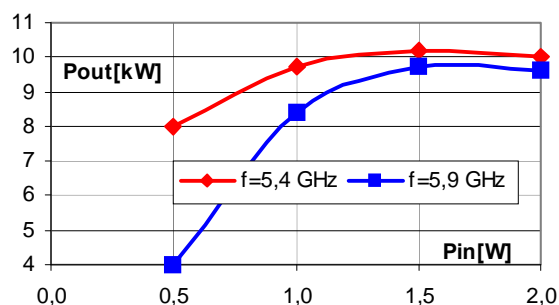
Electrical Requirements

TECHNICAL DATA	MIN	MAX	UNITS
Cathode voltage	-18	-20	kV
Collector voltage	83 % cathode voltage		
Grid bias voltage	-400	-500	V
Grid pulse voltage	+300	+450	V
Cathode pulse current	-	3,8	A
SWS pulse current	-	0,4	A
Duty cycle	-	5,0	%
Pulse width	-	100	μs
Heater voltage	12,0	13,6	V
Heater current	1,3	2,0	A
Heater warm-up time	3		min

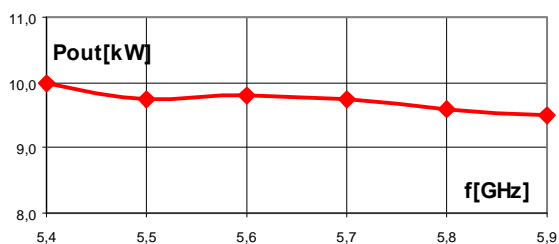
Notes

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

Charts



Output power versus input power



Output power versus input frequency

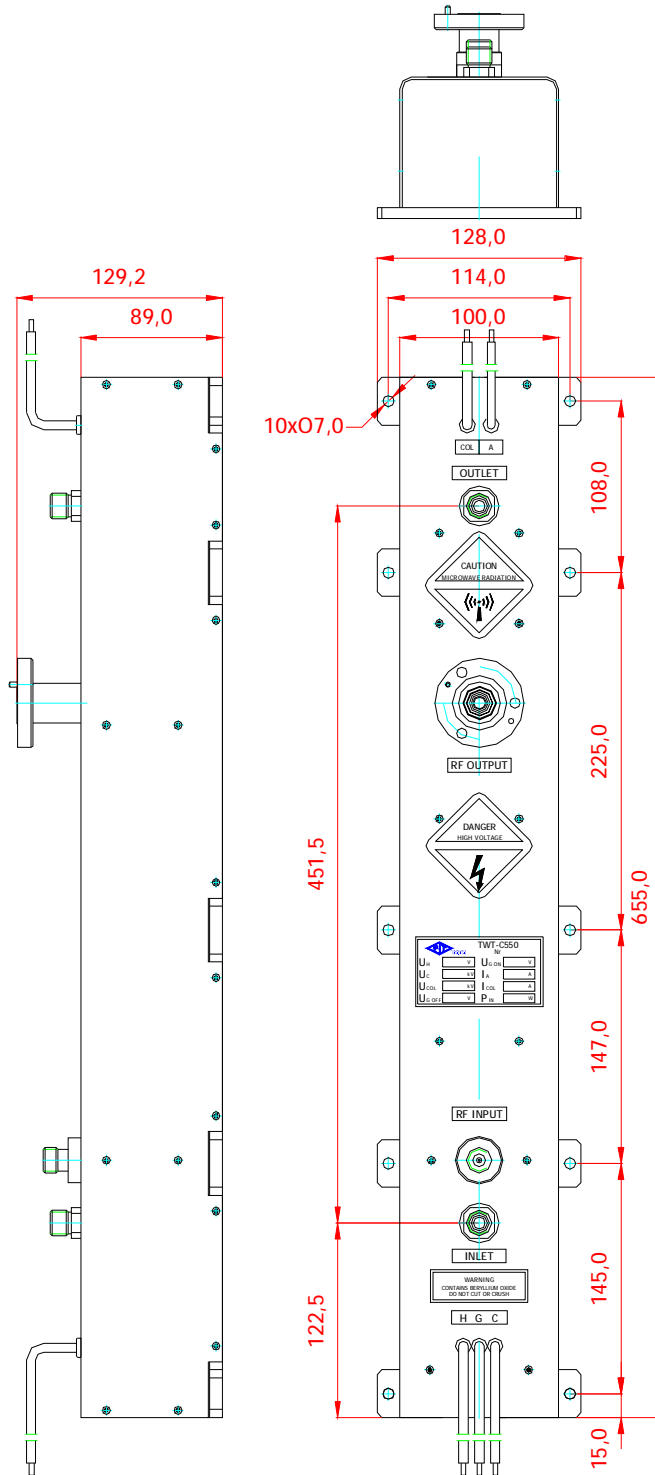
Mechanical Description

Dimensions	See Outline Drawing
Weight	9,4 kg (20,7 lbs)
Liquid cooling	4.0 l/minutes, 60°C max on inlet
Mounting Position	Any
RF input connector	N 50
RF output connector	7/8" EIA

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



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

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