

## Features

Frequency range *	1,1 to 1,9 GHz
RF CW output power **	25 W
Gain	32 dB

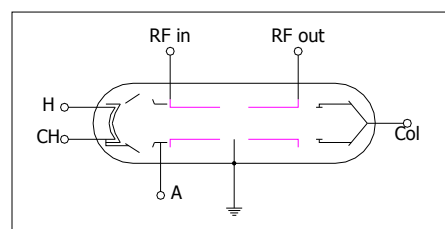
## Description

The L22C is a helix, continuous wave, conduction cooled traveling wave tube for use as a driver for high power traveling wave tubes or as an output tube in test equipment. Each tube delivers at least 15 to 30 W of RF power in L band without adjustment. The tube has a metal-ceramic vacuum envelope, depressed collector and periodic permanent magnet focusing structure.



## RF Performance Requirements

TECHNICAL DATA	MIN	MAX	UNITS
Frequency range	1,1	1,9	GHz
RF drive power	-	15	mW
RF CW output power	15	-	W
Gain	30	-	dB
Load VSWR	2,5:1		

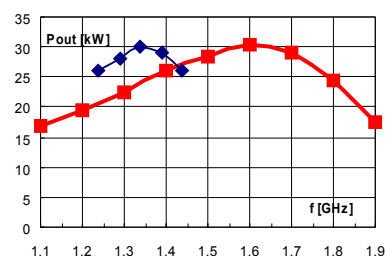


H – heater; CH – cathode-heater;  
A – anode; Col – collector

## Electrical Requirements

TECHNICAL DATA	MIN	MAX	UNITS
Cathode voltage	-1,7	-2,2	kV
Collector voltage	70 % cathode voltage		
Anode voltage	0	-400	V
Cathode current	-	100	mA
SWS current	-	10	mA
Heater voltage	6,0	8,5	V
Heater current	1,5	1,8	A
Heater warm-up time	3	-	min

## Chart



Output power versus frequency  
for  $P_{in} = \text{constant}$ .

## Notes

- The cathode and anode voltage is measured with respect to the ground.
- Collector voltage is measured with respect to the cathode.
- Optimum output power may occur after tuning of RF input power at operating frequency. Maximum value of input drive power has been used 3dB higher than nominal value.

\* 1,24 to 1,44 GHz narrow band version ( min.  $P_{out} = 25$  W), see chart.

\*\* Max 3dB depress output power on the edges of frequency range, see chart.

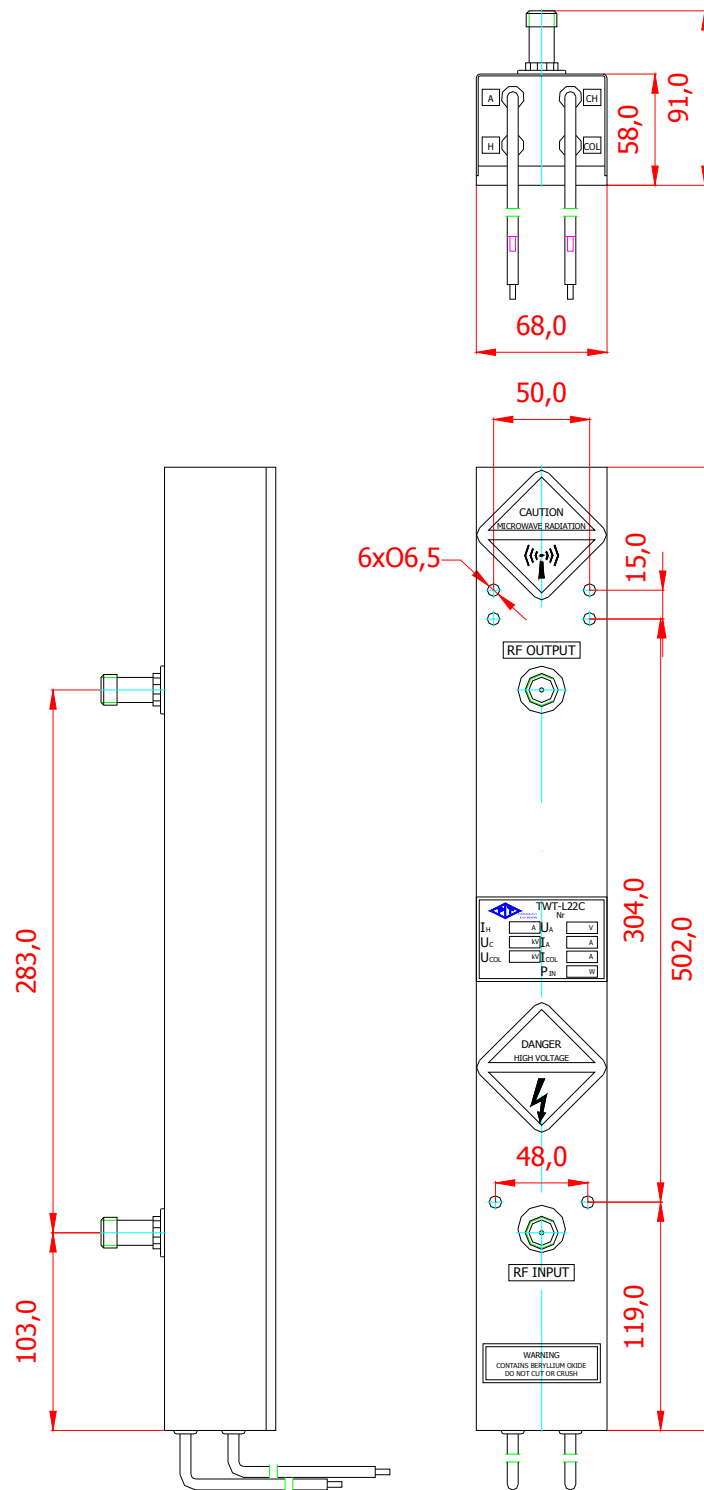
## Mechanical Description

Dimensions	See Outline Drawing
Weight	3,6 kg
Cooling	Conduction
Mounting Position	Any
RF input connector	Type N
RF output connector	Type N
Environment temp.	233-323K

**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: L22C



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

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