

## Features

Frequency range	4,0 to 6,5 GHz
RF CW output power *	15 W
Gain	34 dB

## Description

The C52C 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 25 W of RF power in C band without adjustment. The tube has a metal-ceramic vacuum envelope, and periodic permanent magnet focusing structure.

## RF Performance Requirements

TECHNICAL DATA	MIN	MAX	UNITS
Frequency range	4,0	6,5	GHz
RF CW output power	15	-	W
Gain	30	-	dB
Load VSWR	max 3:1		

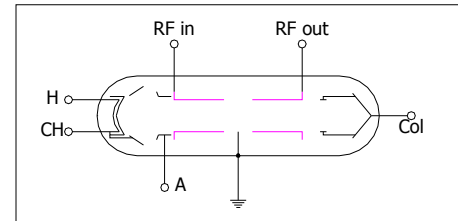
## Electrical Requirements

TECHNICAL DATA	MIN	MAX	UNITS
Cathode voltage	-3,2	-3,8	kV
Anode voltage	-	-500	V
Cathode pulse current	-	100	mA
Duty cycle	-	30	mA
Pulse width	-	100	μs
Heater voltage	6,5	9,0	V
Heater current	1,6	1,8	A
Heater warm-up time	3	-	min

## Notes

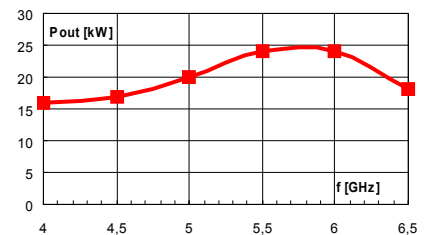
- The cathode and anode voltage is measured with respect to the ground.
- Optimum output power may occur after slight tuning of RF input power at operating frequency. Maximum value of input drive power have been used 3dB higher then nominal value.

\* max 2dB depress output power on the edges of frequency range - see chart



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

## Chart



Output power versus frequency

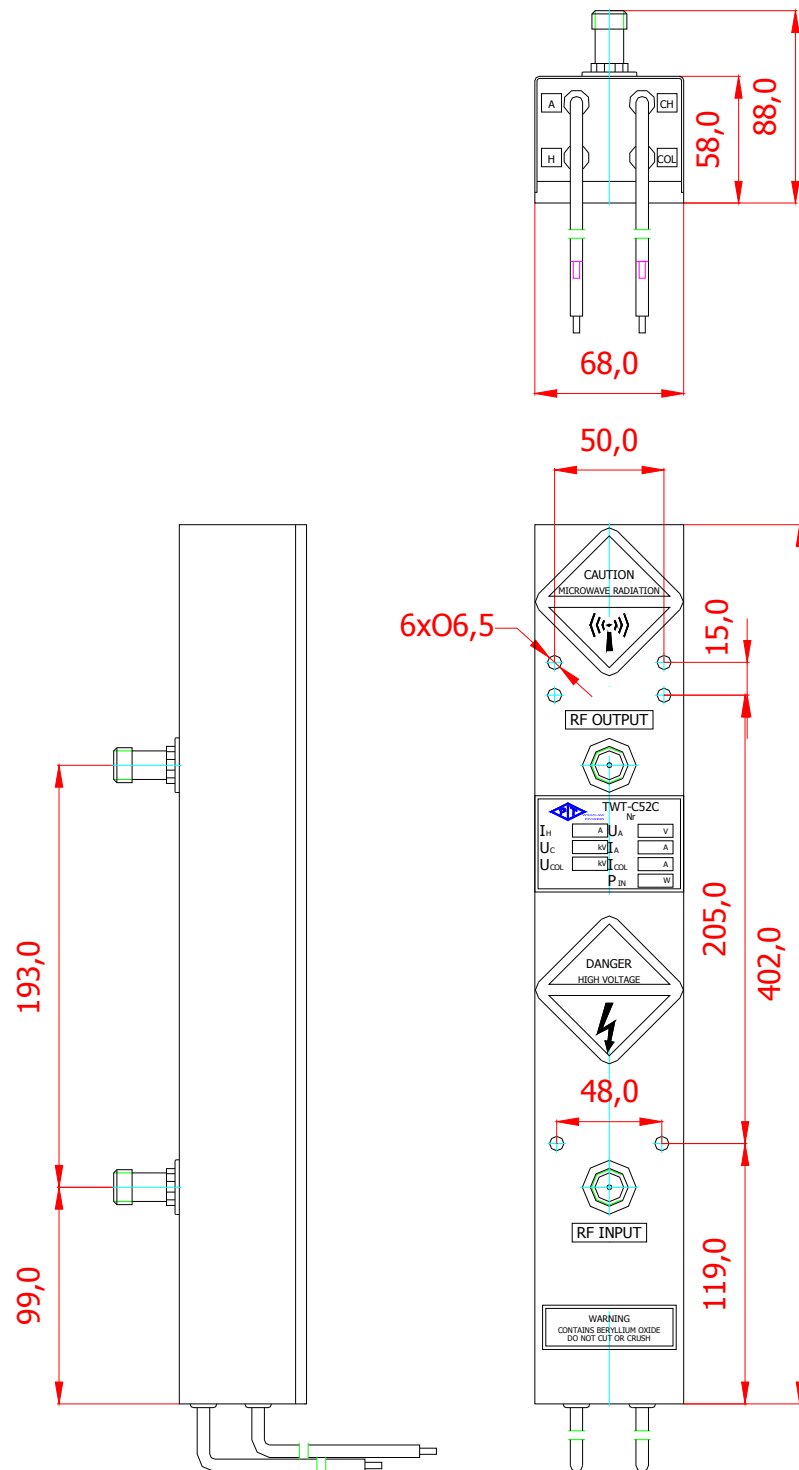
## Mechanical Description

Dimensions	See Outline Drawing
Weight	3,2 kg
Cooling	Conduction
Mounting Position	Any
RF input connector	Type N
RF output connector	Type N

**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: C52C



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