

Features

Frequency range	1,0 to 1,5 GHz
Band width	200 MHz
RF peak output power	4,0 kW
RF average output power	160 W
Gain	21 dB
Duty cycle	4,0 %

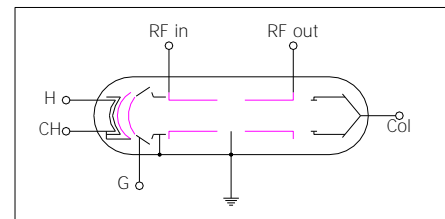
Description

The L113C is a ring and loop, grid-pulsed traveling wave tube for use as a driver or output tube in advanced radar system and test equipment. Each tube delivers at least 4,0 kW of RF peak power and minimum 160 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.



RF Performance Requirements

TECHNICAL DATA	MIN	MAX	UNITS
Frequency range	1,0	1,5	GHz
Band width	-	200	MHz
RF peak output power*	4,0	-	kW
RF average output power	-	160	W
Gain	21	-	dB
RF drive power	-	30	W
Load VSWR	max 2:1		

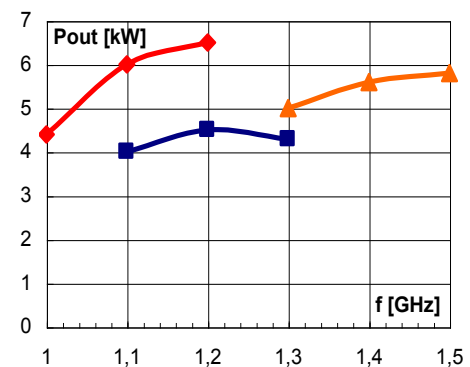


H – heater; CH – cathode-heater;
G – grid; Col – collector

Electrical Requirements

TECHNICAL DATA	MIN	MAX	UNITS
Cathode voltage	-11	-14	kV
Collector voltage	70 % cathode voltage		
Grid bias voltage	-200	-400	V
Grid pulse voltage	+200	+300	V
Cathode pulse current	-	3,0	A
SWS pulse current	-	0,4	A
Duty cycle	-	4,0	%
Pulse width	-	80	μs
Heater voltage	8,0	10	V
Heater current	4,3	4,8	A
Heater warm-up time	3	-	min

Chart



Output power versus frequency

Notes

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

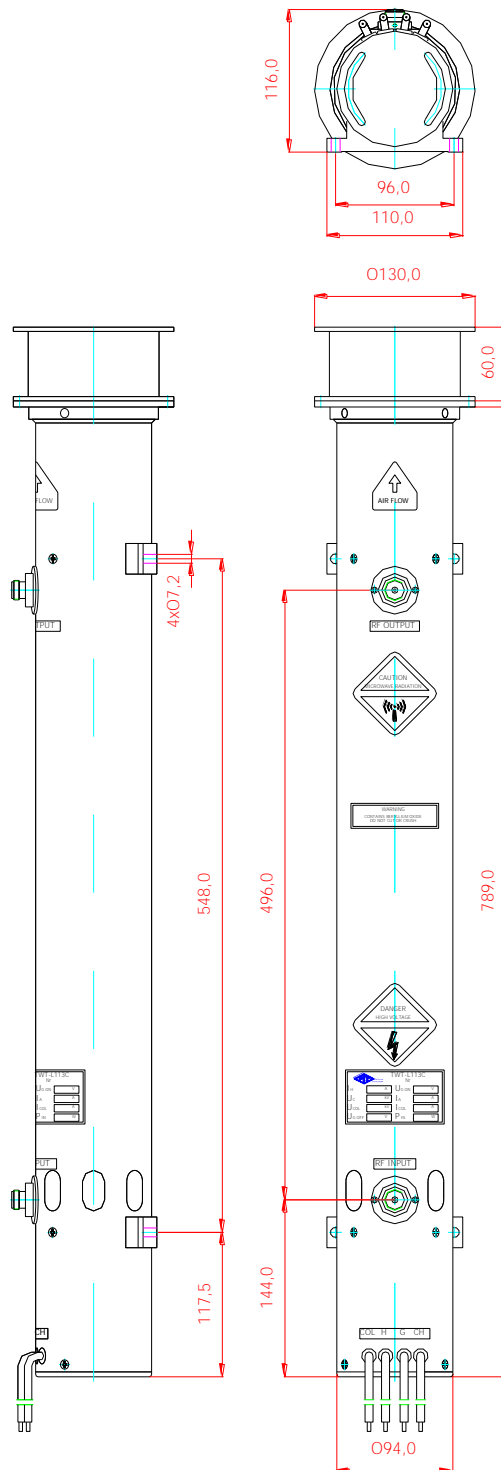
* Presented power is available for band width 200 MHz, see chart

Mechanical Description

Dimensions	See Outline Drawing
Weight	9,5 kg
Cooling	Air Forced
Mounting Position	Any
RF input connector	Type N
RF output connector	Type SC

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

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