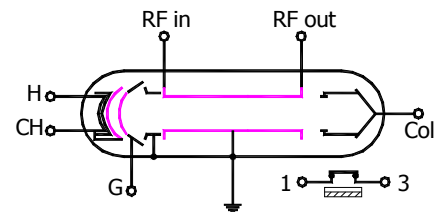


Features

Frequency range	1,5 to 2,0 GHz
RF peak output power	8 kW
RF average output power	80 W minimum
Gain	28 dB minimum
Duty cycle	1 %

Description

The L114 is a ring and loop, grid-pulsed and air cooled traveling wave tube for use as a driver or output tube in advanced radar system and test equipment. Each tube delivers at least 8,0 kW of RF peak power and minimum 80 W of average output power without adjustment. The tube has a metal-ceramic vacuum envelope periodic permanent magnet focusing structure and single-stage depressed collector with normal closed (NC) thermostat.



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

RF Performance Requirements

TECHNICAL DATA	MIN	MAX	UNITS
Frequency range	1,5	2,0	GHz
RF peak output power	8,0	-	kW
RF average output power	80	-	W
Gain	28	-	dB
RF drive power	-	12,5	W
Load VSWR	max 2,5:1		

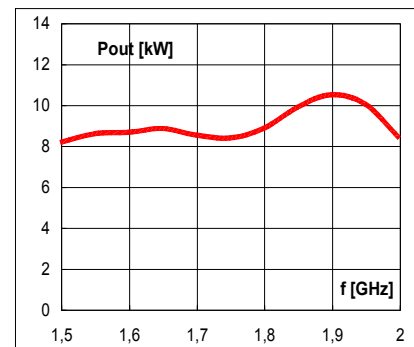
Electrical Requirements

TECHNICAL DATA	MIN	MAX	UNITS
Cathode voltage	-12	-14,5	kV
Collector voltage	75-85 % cathode voltage		
Grid bias voltage	-250	-350	V
Grid pulse voltage	+350	+650	V
Cathode pulse current	-	4,5	A
SWS pulse current	-	2,2	A
Duty cycle	-	1,0	%
Pulse width	-	80	μs
Heater voltage	8,0	10	V
Heater current	4,0	4,8	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



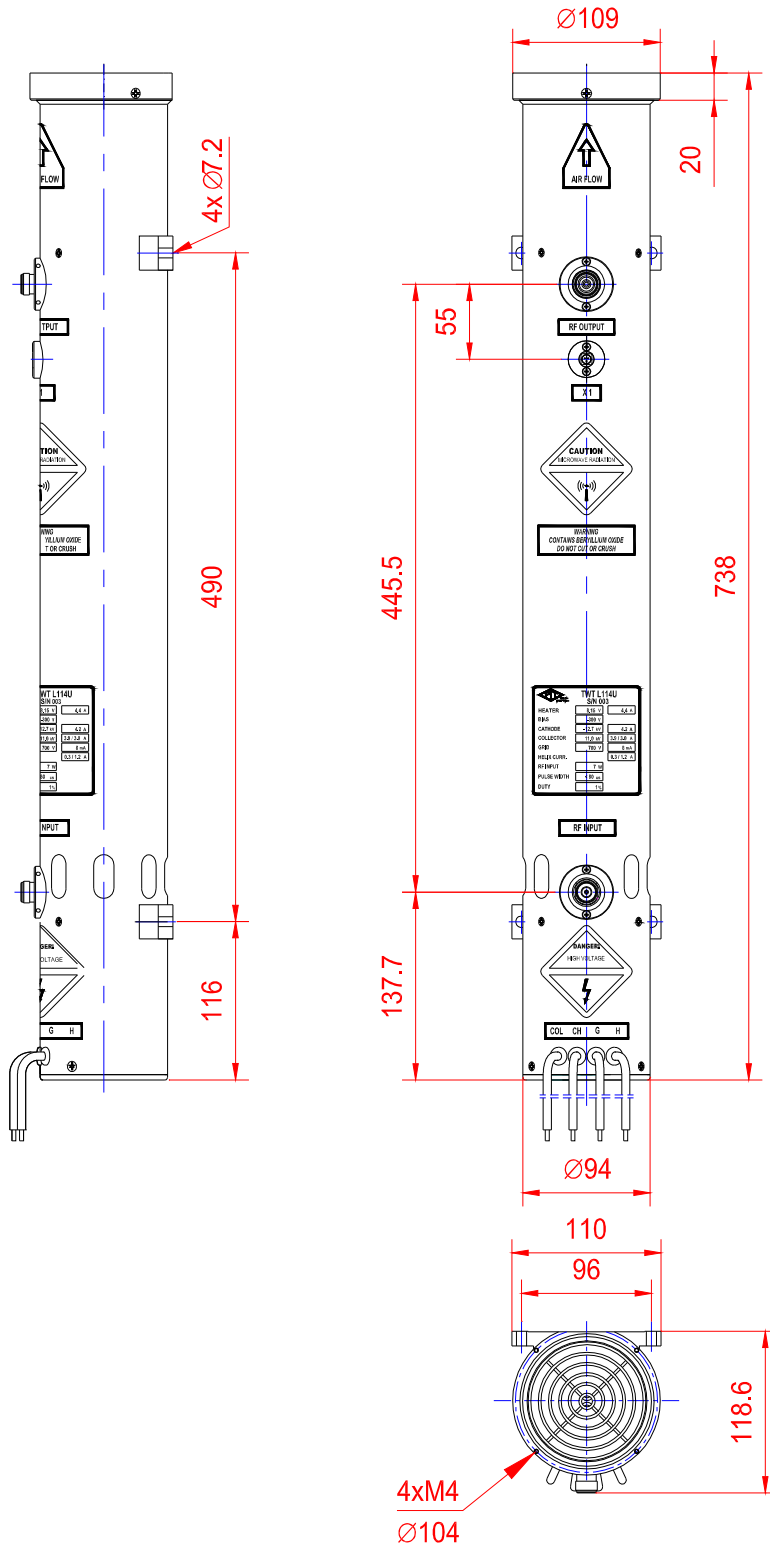
Output power versus frequency
U_{cath}=const, P_{in}=const

Mechanical Description

Dimensions	See Outline Drawing
Weight	7,5 kg
Cooling	Fan – min 160 m ³ /h
Mounting Position	Any
RF input connector	Type N
Thermal switch connector	Type SC

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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 drawings are available on request. All mechanical dimensions are in [mm].

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