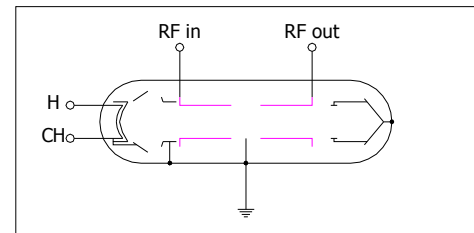


Features

Frequency range F	3,0 to 3,2	GHz
Frequency range E	3,2 to 3,4	GHz
RF peak output power	10	kW
RF average output power	150	W
Gain	27	dB
Duty cycle	1,5	%

Description

The LO-302 is a ring and loop, cathode-pulsed, 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 10 kW of RF peak power and minimum 150 W of average output power in S band without adjustment. The tube has a metal-ceramic vacuum envelope and periodic permanent magnet focusing structure.



H – heater; CH – cathode-heater;

RF Performance Requirements

TECHNICAL DATA	MIN	MAX	UNITS
Frequency range F	3,0	3,2	GHz
Frequency range E	3,2	3,4	GHz
RF peak output power	10	-	kW
RF average output power	150	-	W
Gain	27	-	dB
RF drive power	-	20	W
Load VSWR	max 2:1		

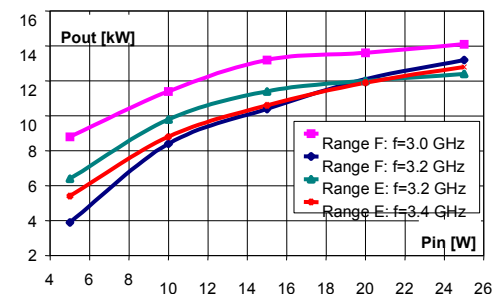
Electrical Requirements

TECHNICAL DATA	MIN	MAX	UNITS
Cathode pulse voltage	-14	-17	kV
Cathode pulse current	3,5	4,5	A
Duty cycle	-	1,5	%
Pulse width	-	50	μ s
Heater voltage	8,0	10,0	V
Heater current	4,3	4,8	A
Heater warm-up time	3	-	min

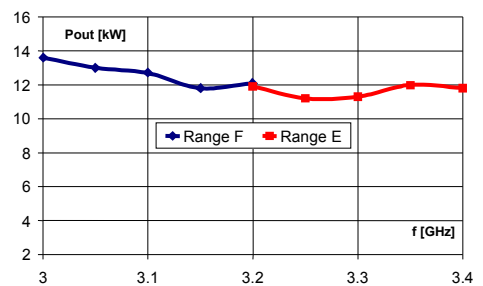
Notes

- The voltage is measured with respect to the ground.

Charts



Output power versus input power



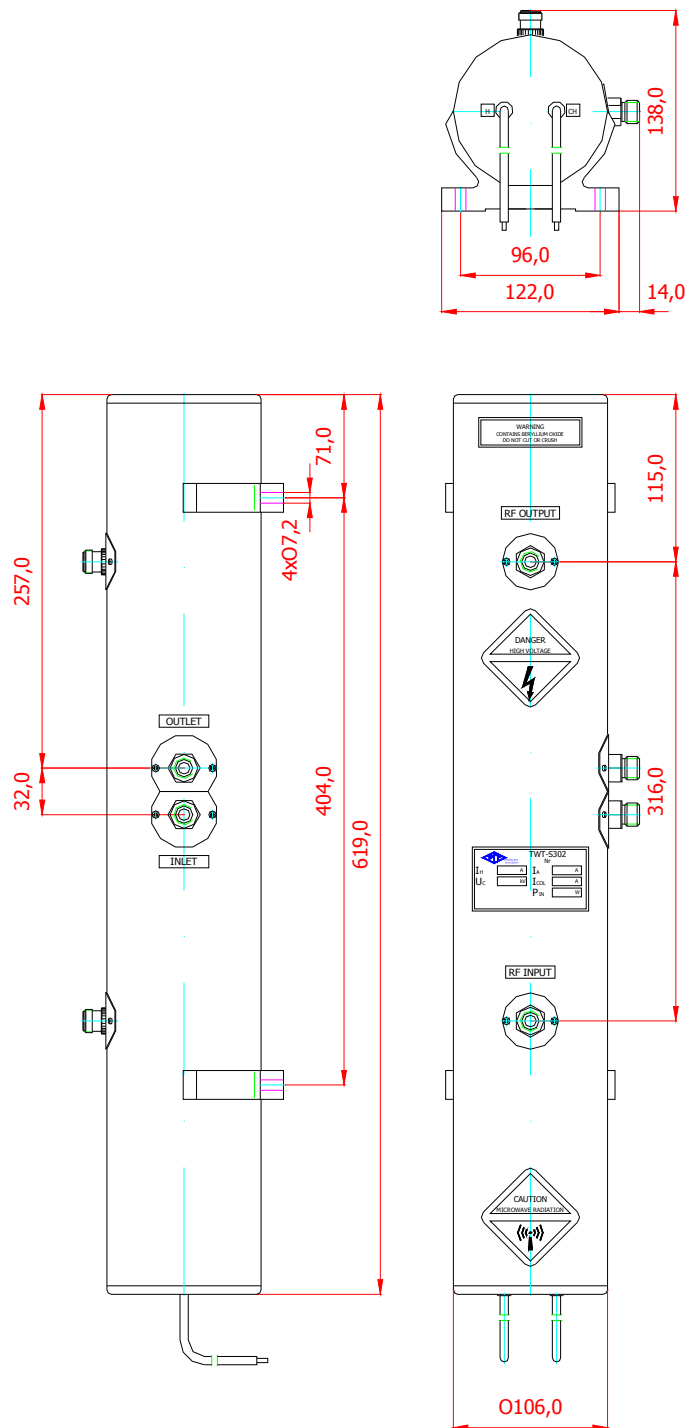
Output power versus input frequency

Mechanical Description

Dimensions	See Outline Drawing
Weight	8,7 kg
Cooling	Liquid
Mounting Position	Any
RF input connector	Type N
RF output connector	Type N

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WROCLAW DIVISION

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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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