

Features

Frequency range *	1,1 to 1,9 GHz
RF peek output power **	30 W
RF average output power	10 W
Gain	30 dB
Duty cycle	30 %

Description

The LO-22 is a helix, grid-pulsed (customize cathode-pulsed version) and conduction cooled traveling wave tube for use as a driver for high power traveling wave tubes or in test equipment. Each tube delivers at least 15 W of RF power in L 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	1,1	1,9	GHz
RF peek output power	15	-	W
RF average output power	10	-	W
Gain	30	-	dB
Load VSWR	3:1		

Electrical Requirements

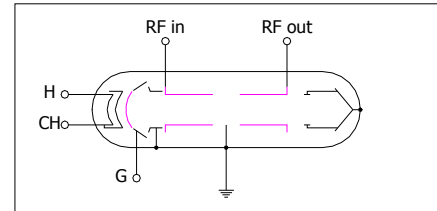
TECHNICAL DATA	MIN	MAX	UNITS
Cathode voltage	-1,7	-2,2	kV
Cathode pulse current	-	100	mA
Grid bias voltage	-	-100	V
Grid pulse voltage	-	100	V
Duty cycle	-	30	%
Pulse width	-	100	μ s
Heater voltage	6,0	8,5	V
Heater current	1,6	1,8	A
Heater warm-up time	3	-	min

Notes

- The cathode voltage is measured with respect to the ground.
- Optimum output power may occur after slight tuning of grid pulse voltage, cathode voltage and RF input power at operating frequency.

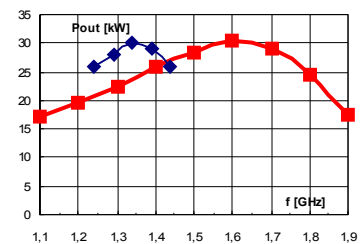
* 1,24 to 1,44 GHz narrow band version (min. $P_{out}=25$ W), see chart.

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



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

Chart



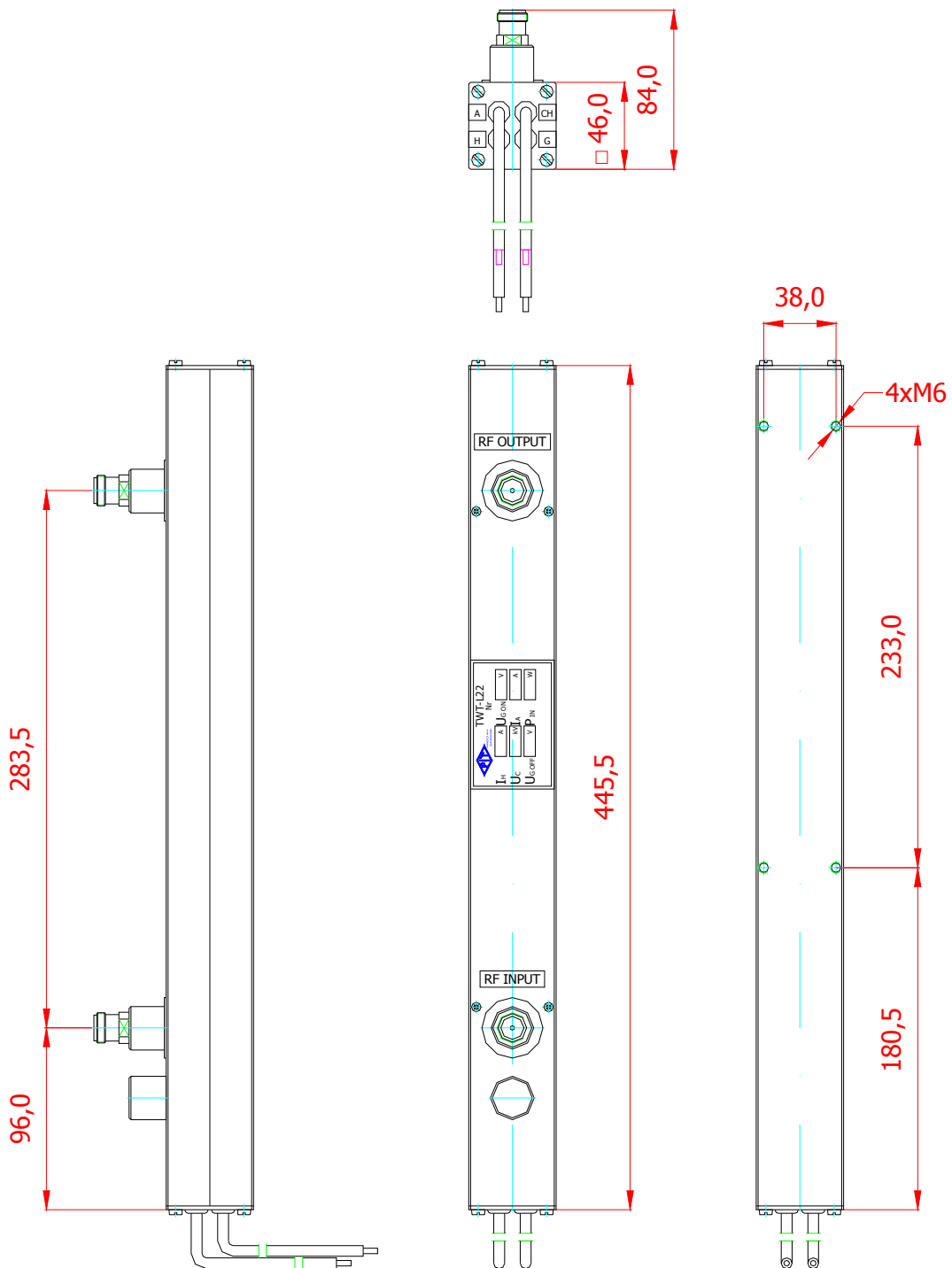
Output power versus frequency

Mechanical Description

Dimensions	See Outline Drawing
Weight	3,0 kg
Cooling	Conduction
Mounting Position	Any
RF input connector	Type N
RF output connector	Type N
Environment temp.	233-323K

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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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