

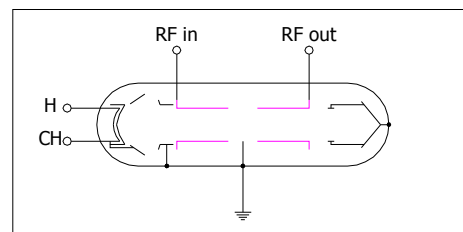
## Features

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	100	W
Gain	27	dB
Duty cycle	1	%



## Description

The LO-301M 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 100 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	100	-	W
Gain	27	-	dB
RF drive power	-	20	W
Load VSWR	max 2:1		

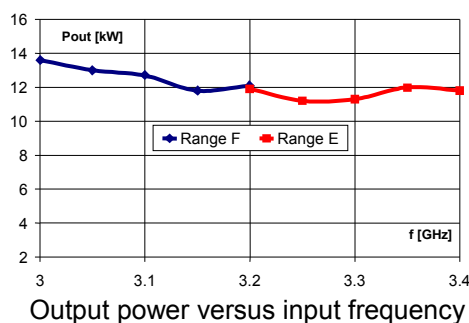
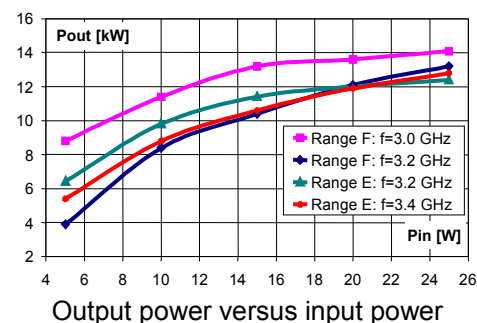
## Electrical Requirements

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

## Notes

- The cathode and ion pump voltages are measured with respect to the ground.

## Charts



## Mechanical Description

Dimensions	See Outline Drawing
Weight	8,7 kg
Cooling	Liquid, max 55°C on inlet
Mounting Position	Any
RF input connector	Type N
RF output connector	Type N

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