

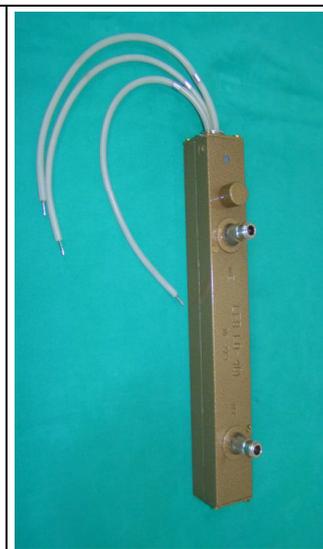


AQAP 2110:2009  
 PN-EN ISO 9001:2009  
 PN-EN ISO 14001:2005  
 PN-N 18001:2004

# DOLAM

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## TRAVELING WAVE TUBE: LO-401

Medium Power Pulse TWT (with Helix Slow Wave Circuit)

The pulsed traveling wave tube is used as driver or as output tube in test equipment

### I. RF Performance Requirements

Technical data	min.	typical	max.	Units
Frequency range	3,0		3,4	GHz
RF Peak output power	25	30		[W]
Gain	34			[dB]
Duty			4	[%]
Load VSWR			2	-

### II. RF Other Parameters

Technical data	min.	typical	max.	Units
Noise		32	40	[dB]
RF input connector	N 50			
RF output connector	N 50			

### III. Electrical Requirements

Technical data	min.	typical	max.	Units
Cathode voltage - pulse	2,0		2,5	[kV]
Grid-bias voltage	-		-	[V]

Positive pulse grid voltage	-		-	[V]
Cathode pulse current			0,15	[A]
Grid pulse current			-	[A]
Pulse width		15		[ $\mu$ s]
Heater voltage	6,0		8,5	[V]
Heater current	1,5		1,7	[A]
Preheating time			3	minutes

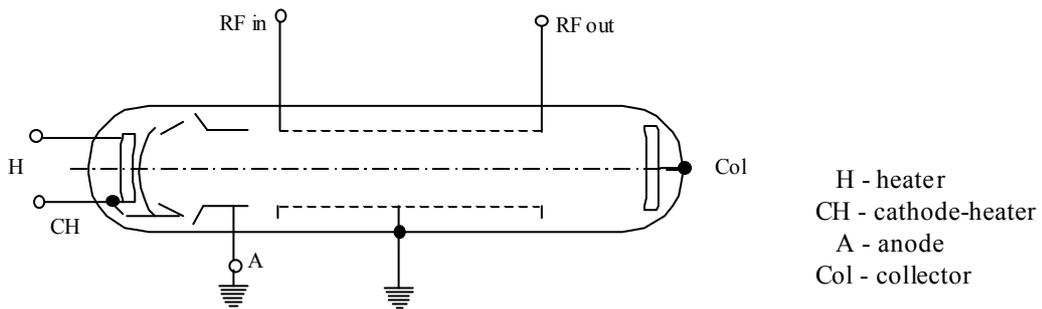


Fig. 1. Scheme connections of electrodes tube LO-401

#### IV. Mechanical Description

- |                      |                              |
|----------------------|------------------------------|
| 1. Dimensions        | See Outline Drawing, Fig. 2. |
| 2. System cooling    | Not required                 |
| 3. Mounting Position | Any                          |
| 4. Weight            | 2,7 kg (6 lbs)               |

#### V. Notes

1. The cathode voltage is measured with respect to the ground.
2. The heater voltage is measured with respect to the cathode.
3. Focusing - Periodic Permanent Magnet.
4. Each tube delivers a peak output power in the given frequency range without tuning adjustment.
5. Optimum peak output power and gain may occur after fine tuning of beam voltage and RF input power.
6. Helix over current protection should be provided in the power supply.
7. Environment temperature from 233 K to 343 K.
8. A ceramic-metal construction provides exceptional mechanical strength.

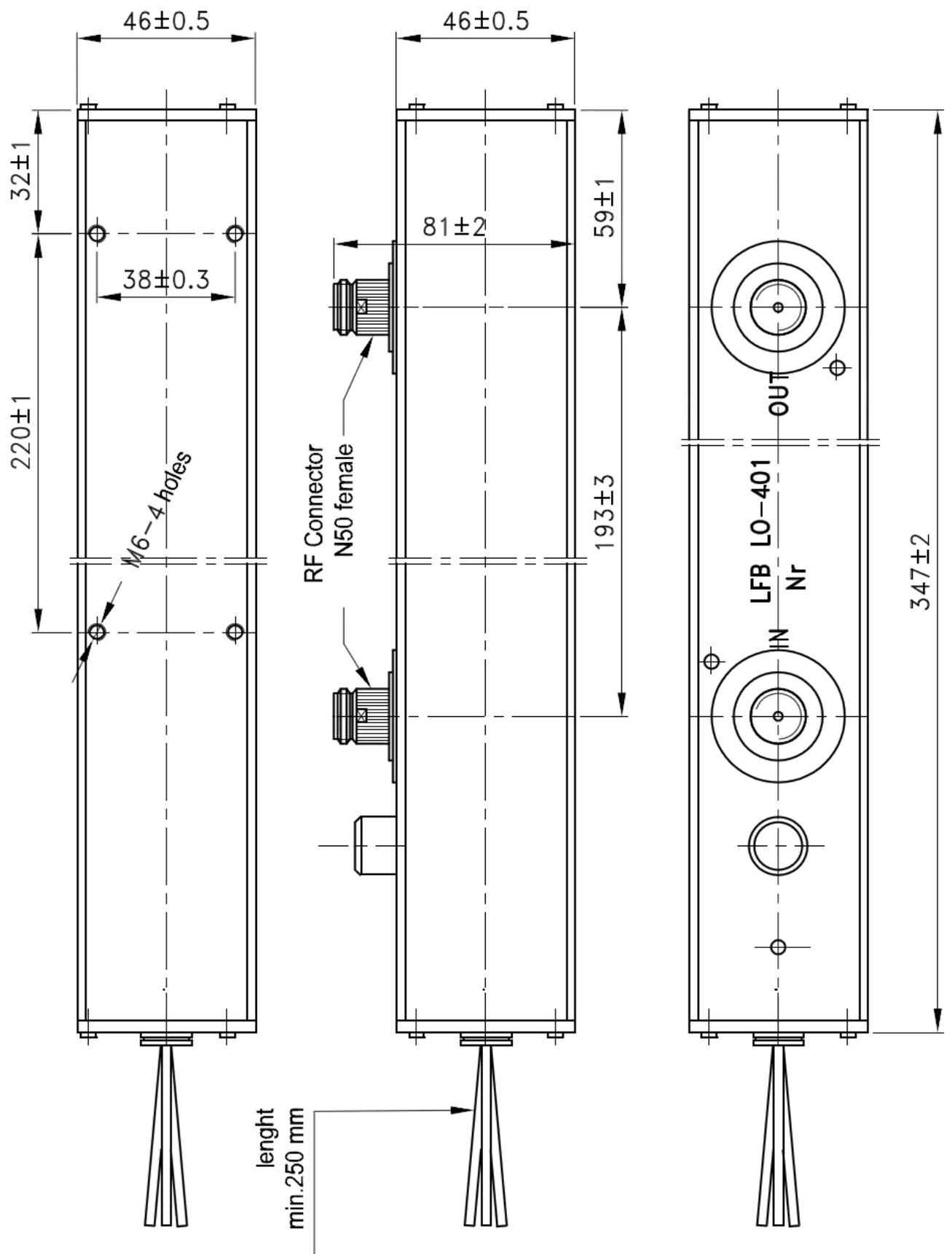


Fig. 2. Dimensions of tube LO-401