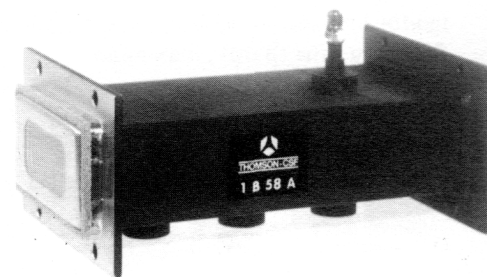


1B58A TR TUBE

The 1B 58 A is a broad band, fixed tuned TR tube designed to operate from 2664 to 2964 MHz, for use as Transmit-Receive gaseous switch in S-band microwave systems.

The 1B 58 A is inserted in the waveguide section by the way to the receiver, protecting it against high energy level by a gas discharge, taking place inside the tube. The gas discharge is induced by an electrode : the ignitor. When the tube is not ionized, the echo propagating towards the receiver is very slightly attenuated.



GENERAL CHARACTERISTICS *

Mechanical

Operating position	any
Mounting	ignitor low level side
Storage temperature	- 40 °C to + 100 °C
Approximate weight	1000 g
Dimensions	see drawing

Electrical

Frequency	2664 to 2964 MHz
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* Characteristics given for information only. See specifications sheet for performance characteristics.

ABSOLUTE RATINGS

(NON SIMULTANEOUS VALUES)

	min.	max.	
Ignitor current	100	200	μA
Ignitor voltage (d.c. supply)	-500	-700	V
Peak applied power	10	750	kW



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TYPICAL OPERATION

Flat leakage energy	0.4 erg
Spike leakage energy	0.3 erg
Insertion loss, maximum	0.5 dB
Ignitor interaction (ignitor current : 200 μ A)	0.3 dB
Recovery time (3 dB), maximum	15 μ s
Ignitor voltage drop, minimum	250 V
maximum	400 V
VSWR in the bandwidth, maximum	1.3 : 1
VSWR at the frequency range limits (1)	1.65 : 1

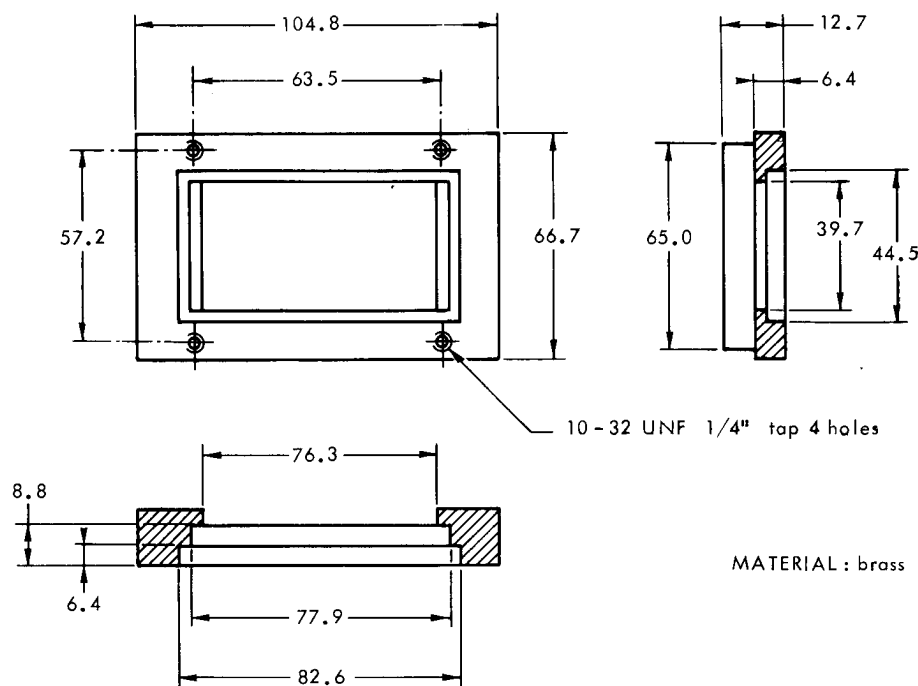
(1) 2664 and 2964 MHz

INSTALLATION

The four mounting screws should be fastened progressively in order to avoid deformation of the flange and window base of the tube.

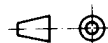
When the tube is mounted, the flange and base are not joined, the electrical contact is insured by a metallic gasket.

Socket



MATERIAL : brass

Dimensions in mm.





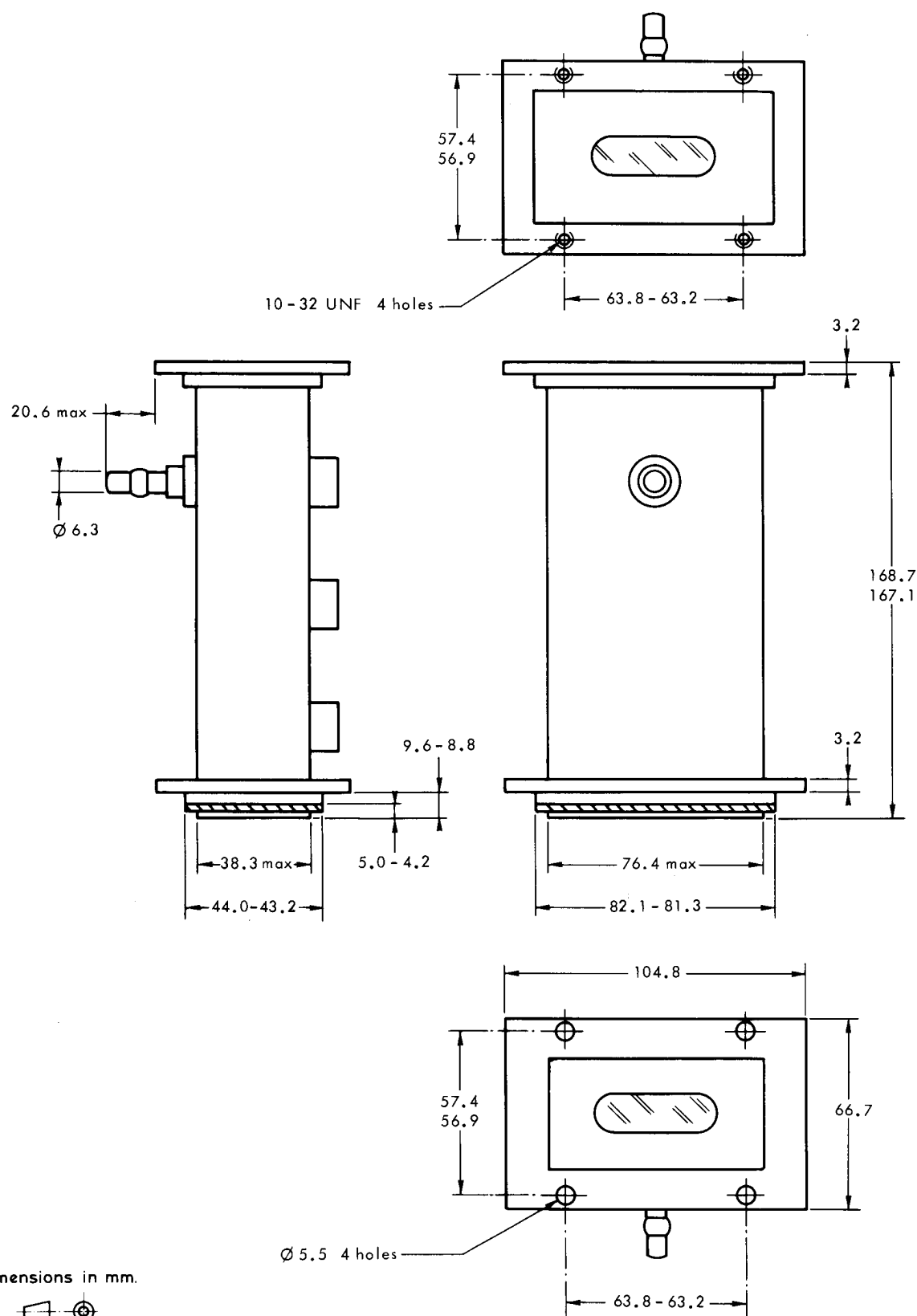
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1B 58 A

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OUTLINE DRAWING



1B 58A



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