



PLUG-IN PRE-TR TUBE

Service Type CV6028

The data should be read in conjunction with the Duplexer Device Preamble.

DESCRIPTION

Broad-band, low loss, plug-in pre-TR tube with no external connections.

CHARACTERISTICS (See note 1)

Frequency range (see note 2)	2.0 to 12	GHz
Breakdown power (see note 3)	20	kW max
Recovery period to -3db (see note 4)	25	μ s max

MAXIMUM AND MINIMUM RATINGS

	Min	Max	
Transmitter power (see note 5):			
peak	—	2.5	MW
mean	—	3.0	kW
Pulse length	—	2.5	μ s
Waveguide pressure	—	300	kN/m ²
	—	44	lb/in ²
Ambient temperature	-50	+100	°C

GENERAL

Overall dimensions	see Outline
Radio-active content (see note 6)	10 microcuries approx
Mounting position (see note 7)	any
Net weight	10g approx

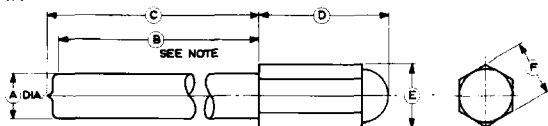
NOTES

1. The tube is tested at 9.5 ± 0.5 GHz in a balanced duplexer in WG16 waveguide; the maximum v.s.w.r. looking outwards from the duplexer does not exceed 1.2:1 on any arm. A pulse length of $0.2\mu\text{s} \pm 10\%$ at a duty cycle of $0.0002 \pm 10\%$ is used.
2. The tube may be used in a suitable waveguide mount at any frequency within this range. The bandwidth and matching are determined by the design of the mount.

3. The power incident on a balanced duplexer.
4. Measured with peak input power $50\text{kW} \pm 10\%$.
5. The power incident on a balanced duplexer where two tubes are each operating across both arms of the duplexer.
6. The radio-activity is low energy β emission, which is completely absorbed by the silica envelope of the tube.
7. The hole through which the tube passes should be 0.3576 ± 0.0005 inch ($9.083 \pm 0.013\text{mm}$) diameter.

OUTLINE

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Ref	Inches	Millimetres
A	0.3568 ± 0.0002	9.063 ± 0.005
B	6.500 min	165.1 min
C	7.000 max	177.8 max
D	1.000 ± 0.010	25.40 ± 0.25
E	0.505 max	12.83 max
F	0.434 ± 0.003	11.024 ± 0.076

Millimetre dimensions have been derived from inches.

Outline Note Dimension B refers to the ground length.