VALVE ELECTRONIC **CV 263**

MINISTRY OF AVIATION - R.R.E.

Specification MOA/CV263 Issue 6 Dated 25.9.64 To be read in conjunction with K1001	SECURITY Specification: Unclassified Valve: Unclassified

→ Indicates a change

TYPE OF VALVE - Gas-filled Power Indicator Tube CATHODE - None ENVELOPE - Glass PROTOTYPE - VX3026	MARKING See K1001/4 BASE See Drawing on Page 3
RATING This Indicator Tube is suitable for measuring peak RF power up to 1000 watts within the frequency range of 2800-11000 Mc/s.	DIMENSIONS See Drawing on Page 3 MOUNTING POSITION Any NATO STOCK NO. 5960-99-000-0263

NOTE

→ A. The gas-filling shall be a mixture of inert gasses, predominantly neon.

To be performed in addition to those applicable in K1001

	Test Conditions	Test	Limits		No. Tested	Note
			Min.	Max.		
→ a	The Indicator Tube shall be energised with 850 watts peak RF power. Frequency = 9375 ± 500 Mc/s; PRF = 2000 pps ± 10% Tp = 0.5 µsec ± 10%	Height of glow (mm)	40	50	100%	1,2
→ b	Apply 750 watts peak at 3350 ± 50 mc/s, prf 600, pulse width 1 µs.	Height of glow (mm)	40	-	QA	3
→ c	As for Test (a)	Height of glow (mm) measured after 7 days' storage period.	40	50	5%	

NOTES

→ 1. The tube under test shall be inserted into the standard mount, Wattmeter Absorption Type 2 (A.M. Ref. No. 10AF/525). The standard mount shall be coupled by means of a directive feed to a wave guide line, and the line shall be terminated in a resistive load. The directive feed and the peak R.F. power in the wave guide shall be adjusted to give 850 watts peak R.F. power into the wattmeter, as determined from the p.r.f. pulse width, and the average power indicated by a thermistor bridge. (Hewlett Packard type 430C using a thermistor type 477B is suitable.)

→ 2. Alternatively the glow height may be checked against a standard tube, the glow height of the standard being adjusted to 45 mm.

3. The Indicator Tube shall be tested using a standard mount - Wattmeter, Neon, Type CT17. The wattmeter shall be coupled through a coaxial-to-waveguide Transformer, Type XT33 to a Directional Coupler, Type XT16 and thence to a No. WG10 waveguide system. A similar system using a coaxial-to-waveguide Transformer, Type XTA15 and a No. WG11 waveguide line is permissible. The test frequency shall be 3000 ± 200 Mc/s, and the peak RF power in the waveguide shall be adjusted to give 750 watts.

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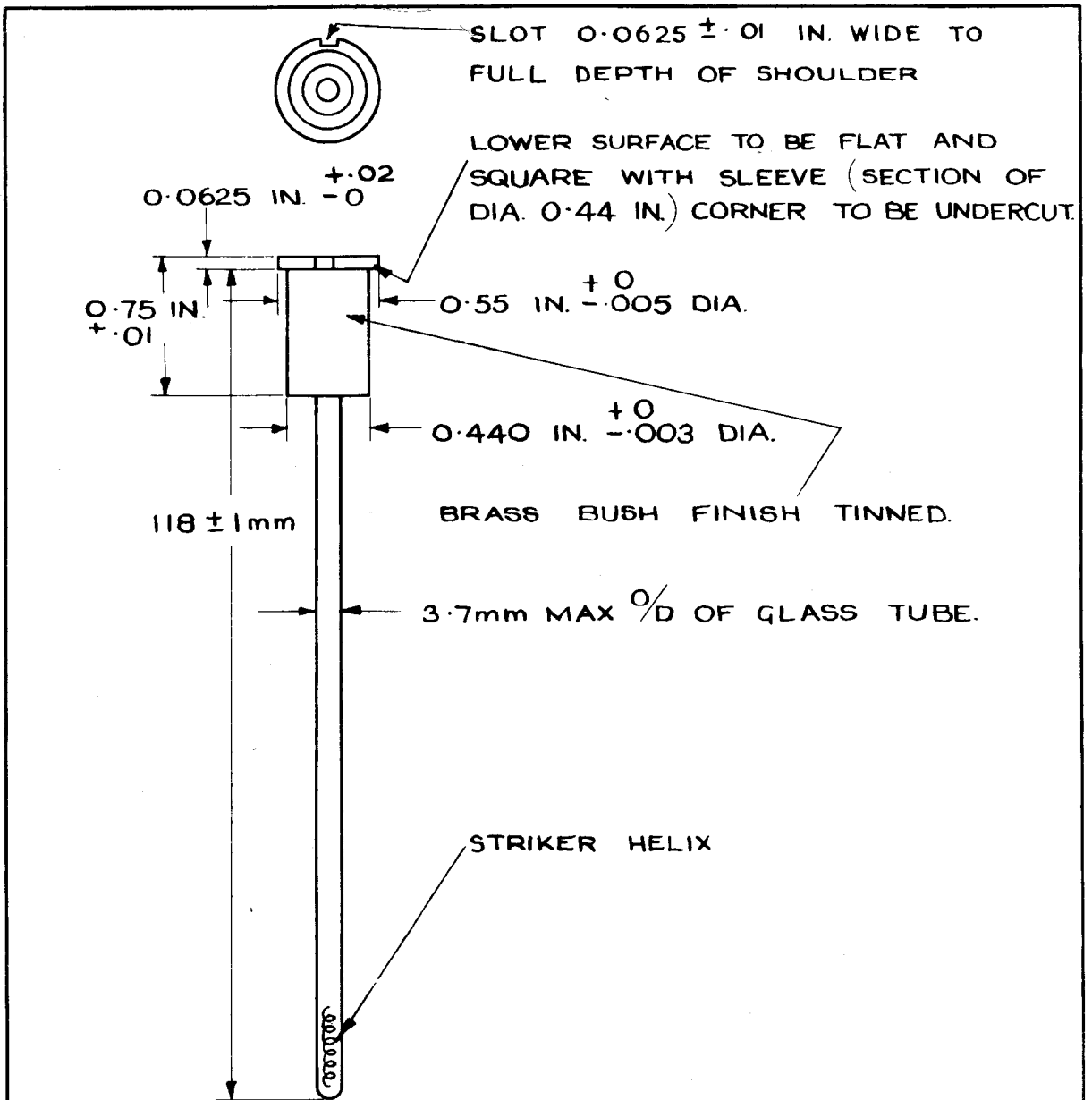

NOTE: THE END OF THE GLASS TUBE WHICH CONTAINS THE PROBE MUST BE CONCENTRIC WITH THE BRASS BUSH TO WITHIN 2mm.