

Amendment No.1
to Specification CV.293 - Issue 3 -
dated 7th March, 1957

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Under "Tests".

Amend to read:-

"To be performed in addition to those applicable
in K1001 and after 7 days holding period".

T. V. C.
for A. S. R. E.

July, 1957

N. 5138

ADMIRALTY SIGNAL AND RADAR ESTABLISHMENT

Specification AD/CV293 Issue No. 3 dated 7.3.57 To be read in conjunction with K1001, ignoring clauses 5.2 and 5.8	<u>SECURITY</u>	
	<u>Specification</u>	<u>Valve</u>
	Unclassified	Unclassified

→ Indicates a change

→	<u>TYPE OF VALVE:</u> → T.R. Switch for Waveguide input and output. <u>PROTOTYPE:-</u> CV193 modified for Waveguide output.	<u>MARKING</u> See K1001/4
	<u>RATINGS</u>	<u>DIMENSIONS AND CONNECTIONS</u>
	All limiting Values are absolute	Note
→	Operating Frequency (Mc/s) 2925 to 3075	See drawing on Page 3
→	Min. Primer Supply Voltage (V) -800	A
→	Max. Primer Operating Current (uA) 150	A
→	Min. Primer Operating Current (uA) 100	A
→	Max. Peak Power (kW) 500	B
	<u>NOTES</u>	
→	A. Primer current to be limited by a series resistance of which at least 1 Megohm must be adjacent to the valve.	
→	B. With duty ratio not exceeding 0.001	

TESTS

To be performed in addition to those applicable in K1001 and after 28 days holding period.

	Test Conditions	Test	Limits		No. Tested	Note
			Min.	Max.		
a	See Note 1	<u>Primer Operating Voltage</u> (V) The primer voltage shall be measured after breakdown has occurred.	250	450	100%	1
b	The transmission line shall be energized by not more than 100mW, RF. The frequency tuning range shall be obtained by adjusting the two tuners.	<u>Frequency Range</u> (Mc/s)	2925 to 3075		100%	2

NOTES

1. The dc primer supply voltage shall be 800 V having a peak to peak ripple voltage not exceeding 1%, and the primer shall be negative with respect to the resonator. The regulation of the supply shall be negligible up to load currents of 200 μ A.
The current through the valve shall be limited to 150 μ A by series resistances of which at least 1 Megohm must be placed adjacent to the valve.
2. The upper limit of the frequency range is found by turning the tuning slugs in as far as possible and then measuring the resonant frequency of the cavity in that state. The lower limit of the frequency range is found by removing the tuning slugs, then screwing them two turns back into the cavity, and measuring the resonant frequency of the cavity in that state.

