

Specification MOA/CV 4524	<u>SECURITY</u>
Issue 1 dated 3rd January, 1962	Specification Valve
To be read in conjunction with K1001	Unclassified Unclassified

indicates a change

<p><b>TYPE OF VALVE:</b> Rugged Tunable Klystron oscillator with integral cavity and waveguide output</p> <p><b>CATHODE:</b> Indirectly-heated</p> <p><b>ENVELOPE:</b> Shielded metal glass</p> <p><b>PROTOTYPE:</b> CV4515</p>	<p><u>MARKING</u></p> <p>See K1001/4</p> <p>Addition Marking</p> <p>Serial No.</p>																																																																																								
<p style="text-align: center;"><u>RATING</u></p> <p>All limiting valves are absolute</p> <table border="1"> <thead> <tr> <th></th> <th></th> <th>Note</th> <th></th> </tr> </thead> <tbody> <tr> <td>Heater Voltage</td> <td>(V)</td> <td>6.3</td> <td></td> </tr> <tr> <td>Heater Current</td> <td>(A)</td> <td>0.56</td> <td></td> </tr> <tr> <td>Mechanical Tuning Frequency</td> <td>(Mc/s)</td> <td>8970</td> <td>B</td> </tr> <tr> <td></td> <td></td> <td>to</td> <td></td> </tr> <tr> <td></td> <td></td> <td>10,000</td> <td></td> </tr> <tr> <td>Min. R.F. Power Output</td> <td>(mW)</td> <td>30</td> <td></td> </tr> <tr> <td>Max. Resonator Voltage</td> <td>(V)</td> <td>400</td> <td></td> </tr> <tr> <td>Max. Resonator dissipation</td> <td>(W)</td> <td>20</td> <td></td> </tr> <tr> <td>Reflector Voltage Range (Vres = 350V)</td> <td>(V)</td> <td>-250</td> <td>C</td> </tr> <tr> <td></td> <td></td> <td>to</td> <td></td> </tr> <tr> <td></td> <td></td> <td>-400</td> <td></td> </tr> <tr> <td>Max. Mechanical Resetting error</td> <td>(Mc/s)</td> <td>3</td> <td></td> </tr> <tr> <td>Min. Electronic tuning Range</td> <td>(Mc/s)</td> <td>±10</td> <td></td> </tr> <tr> <td>Min. Electronic tuning Gradient at Mode optimum</td> <td>(Mc/s/V)</td> <td>0.5</td> <td></td> </tr> <tr> <td>Max. total impedance in Reflector to Cathode Circuit</td> <td>(M ohms)</td> <td>0.5</td> <td></td> </tr> <tr> <td>Max. operating Ambient temperature</td> <td>(°C)</td> <td>70</td> <td></td> </tr> <tr> <td>Max. Ambient Storage temperature Range</td> <td>(°C)</td> <td>-60/+85</td> <td></td> </tr> <tr> <td>Max. Body temperature</td> <td>(°C)</td> <td>165</td> <td>D</td> </tr> <tr> <td>Max. Vibration (10 minutes duration Max.)</td> <td>(g)</td> <td>20</td> <td>E</td> </tr> <tr> <td>Max. Constant Acceleration</td> <td>(g)</td> <td>50</td> <td></td> </tr> <tr> <td>Min. Operating Pressure</td> <td>(mms.Hg)</td> <td>20</td> <td></td> </tr> </tbody> </table>			Note		Heater Voltage	(V)	6.3		Heater Current	(A)	0.56		Mechanical Tuning Frequency	(Mc/s)	8970	B			to				10,000		Min. R.F. Power Output	(mW)	30		Max. Resonator Voltage	(V)	400		Max. Resonator dissipation	(W)	20		Reflector Voltage Range (Vres = 350V)	(V)	-250	C			to				-400		Max. Mechanical Resetting error	(Mc/s)	3		Min. Electronic tuning Range	(Mc/s)	±10		Min. Electronic tuning Gradient at Mode optimum	(Mc/s/V)	0.5		Max. total impedance in Reflector to Cathode Circuit	(M ohms)	0.5		Max. operating Ambient temperature	(°C)	70		Max. Ambient Storage temperature Range	(°C)	-60/+85		Max. Body temperature	(°C)	165	D	Max. Vibration (10 minutes duration Max.)	(g)	20	E	Max. Constant Acceleration	(g)	50		Min. Operating Pressure	(mms.Hg)	20		<p><u>BASE, CONNECTIONS, DIMENSIONS, MOUNTING POSITION, AND NOTES</u></p> <p>See specification CV4515</p> <p>Issue 1 dated 17/11/58</p>
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<p style="text-align: center;"><u>TESTS</u></p> <p>The tests required by specification MOS/CV 4515 shall be performed except that -</p> <p>(a) the frequency tuning range or band where mentioned, shall read 8970 to 10,000 Mc/s and</p> <p>(b) test frequency (a) in Note 4, page 6, shall be amended to read 8970 Mc/s</p> <p>JOINT SERVICE CATALOGUE NUMBER: 5960/99/037/2538</p>																																																																																									