

Specification Mintech./CV6202	<u>SECURITY</u>
Issue 1A, Dated September 1968.	<u>Specification</u> Valve
To be read in conjunction with K1001.	Unclassified Unclassified

• indicates change.

TYPE OF VALVE: Tunable Reflex Klystron Oscillator	<u>MARKING</u>
CATHODE: Indirectly Heated	See K1001/4
ENVELOPE: Metal, Ceramic	<u>BASE</u>
PROTOTYPE: CV2494	Flying leads, 18" long.

RATINGS, CHARACTERISTICS, CONNECTIONS, DIMENSIONS

These shall be as specified in Specification Mintech./CV2494, Issue 1A, Dated October 1967, except that the Heater Current Rating = 0.9 Amps.

TESTS

The tests to be performed shall be those tests specified in Specification Mintech./CV2494, Issue 1A, Dated October 1967, amended as follows:-

(i) GROUP A

- (a) Heater Current: limits to be Min. - 0.8 ; Max. - 1.0A.
(b) Insert new test:-

K1001 Ref.	Test	Test Conditions	Insp. Level	Sym- bol	Limits		Unit
					Min	Max	
-	Warm-up	Measured at 8500 MHz and 9655 MHz. Note 11.	100%	Po	-	1	dB

(ii) GROUP F Life Test. The following life test to be performed:-

K1001 Ref.	Test	Test Conditions	Insp. Level	Sym- bol	Limits		Unit
					Min.	Max.	
App. VI/5.3	Life	At any frequency between 8500 and 9655 MHz. Mode 5.	Note 10				
	<u>End Point 1200 hours</u>						
	Power Output	Note 12.		Po	32	-	mW

(iii) NOTES

(a) Substitute the following Note 10:-

10. Life test shall be performed on at least one sample out of every 25 valves successfully passing the Group A tests. The number of samples taken shall not be less than one during a three calendar month production. The criterion for acceptance of each batch is that the average life of all samples tested out of that batch shall not be less than 1000 hours. The valves shall run intermittently and during life test the relevant valve performance characteristics shall be measured at the following time intervals:- 100 hours; 300 hours; 500 hours; 750 hours; 1000 hours; 1200 maintained to within ± 12 hours.

Any valve failure occurring up to the 100 hour measuring point shall be disregarded and removed from the test. A further sample shall then be submitted to life test.

A valve known to be satisfactory at one measuring point but unsatisfactory at the next measuring point shall be accorded the number of hours accumulated to the mid-point between the two measuring points.

Failure of a valve due to associated test equipment failure shall not be considered a valve failure and under these circumstances a further sample shall be submitted to life test.

/(b) Note 11. over.

Therefore, to
avoid testing on
Saturdays or Sundays,
life tests must
be stopped on
Friday!

(iv) Insert new Note 11.

11. The heater and F.T. voltages shall be applied simultaneously, power output shall be measured 20 seconds after application of the supplies. The valve shall be bolted to the plain flange of a 2 ft. length of W.G. 16 waveguide and shall be in free air.

(v) Insert new Note 12.

12. Providing the valve is in continuous production, i.e. a break in production of not more than six months and the three previous batches have been accepted for life test, the fourth and subsequent batches may be delivered if the life test sample appropriate to that batch is satisfactory at the 300 hours test point. The life test sample shall remain on test for the complete life test period in accordance with the requirements of Note 10. In the event of a failure to meet the above criteria, normal life test shall be reinstated until such time as three consecutive batches are again accepted.

N.A.T.O. Stock Number - 5960 - 99 - 037 - 5433