ELECTRONIC VALVE SPECIFICATIONS

SPECIFICATION CV. 7026-30

ISSUE NO. 1 DATED 25.6.1959

AMENDMENT NO. 1

age 1.	DIMENSIONS	Delete "see drawing on page 4". Insert "K1007/A1/D10".
age 4		Delete drawing at the bottom of this page.

Ministry of Aviation/RRE

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VALVE ELECTRONIC SEMICONDUCTOR DEVICE

CV7026 — CV7030

Specification MOS/CV7026/27/28/29/30 Issue 1, dated 25th June, 1959. To be read in conjunction with K1007	SECURITY Specification: UNCLASSIFIED Device: UNCLASSIFIED

Indicates a change ←

TYPE OF DEVICE - Silicon Power Rectifier
CONSTRUCTION - Metal body, wire end leads
PROTOTYPE -

MARKING

CV Number, Polarity Markings and if practicable Factory Code & Date Code — See K1007/4

RATINGS AND CHARACTERISTICS

All limiting values are absolute

			Note
Max. Peak Inverse Voltage, -40°C to +125°C; CV7026	(V)	100	C
CV7027	(V)	200	C
CV7028	(V)	400	C
CV7029	(V)	600	C
CV7030	(V)	800	C
Max. Mean Rectified Forward Current.			
at 25°C	(A)	0.75	A
at 100°C	(A)	0.5	A
Max. Reverse Current at max. P.I.V. at 25°C	(uA)	20	
at 100°C	(uA)	300	
Max.Surge Current at 25°C	(A)	15	B
Max.Continuous Vibration	(g)	10	
Max.Shook	(g)	500	

DIMENSIONS

See drawings on page 4

MOUNTING POSITION

Any

PACKAGING

See K1007 Section 14

NOTES

A. See derating curves on page 2.
B. Applies to all transients and is a maximum peak current where tw is not greater than 10 mSecs.
C. This rating applies to all waveforms including very short transients.

Joint Services Catalogue Nos. for CV7026, 5960 - 99 - 037 - 2045
for CV7027, 5960 - 99 - 037 - 2046
for CV7028, 5960 - 99 - 037 - 2047
for CV7029, 5960 - 99 - 037 - 2048
for CV7030, 5960 - 99 - 037 - 2049

CV7026-30

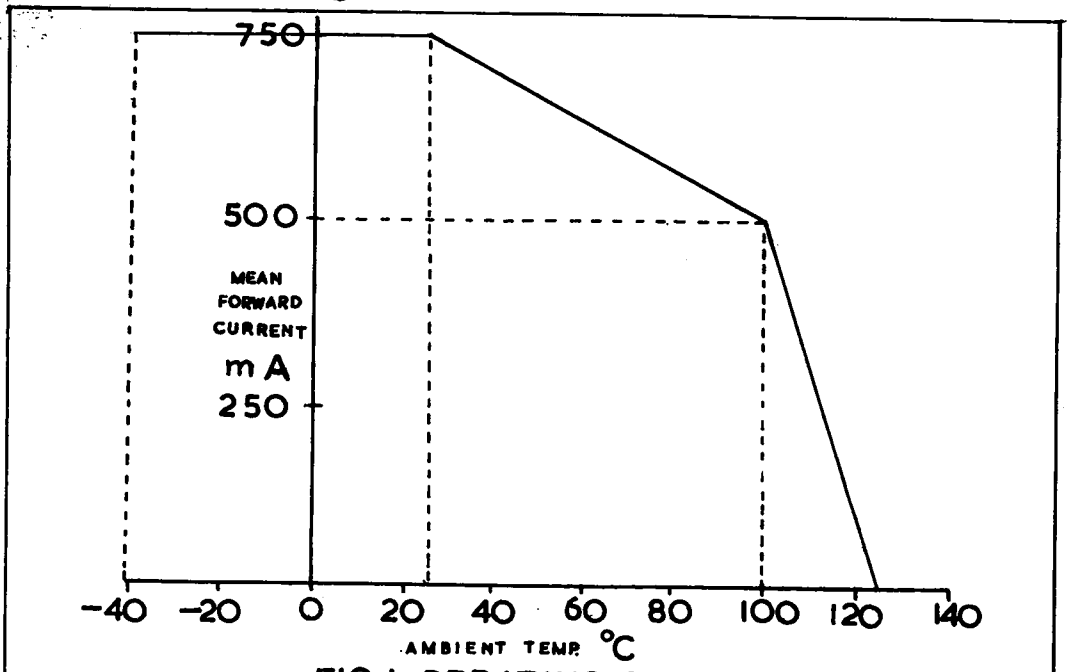


FIG. 1. DERATING CURVE

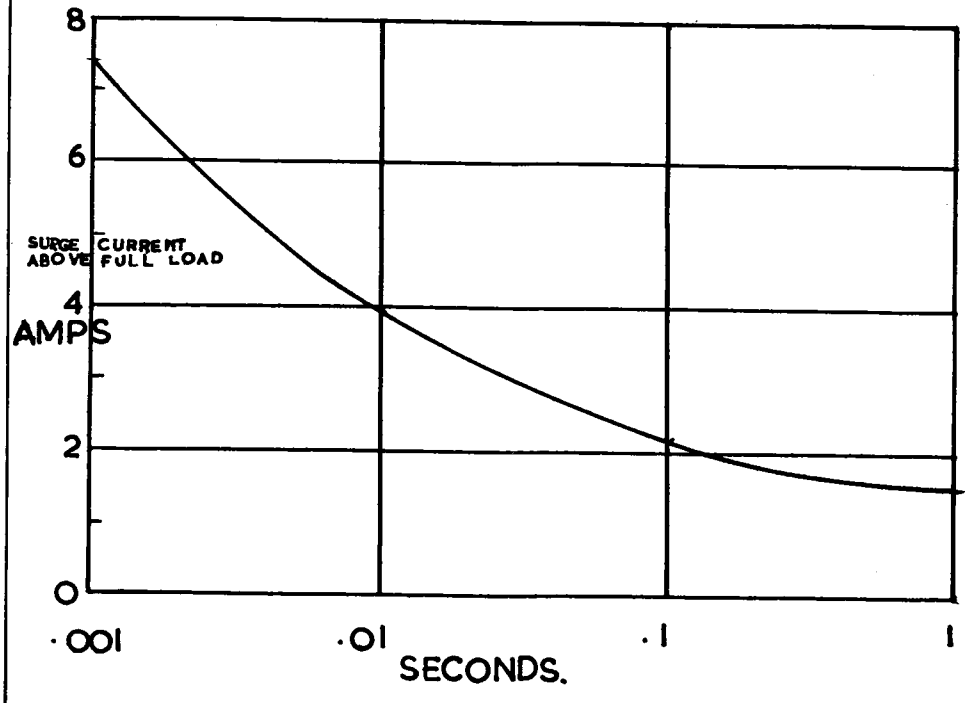


FIG.2. SURGE RATING

CV7026-30

TESTS

To be performed in addition to those in K1007 Sections 5.2 & 5.3

K1007	TEST	TEST CONDITIONS	AQL %	Insp. level	Sym-bol	LIMITS Min.	LIMITS Max.	UNITS
	GROUP A							
5C.4	Forward Voltage Drop	If = 0.75A d.c. Tamb = 15°C-30°C		100%	Vf	-	1.0	V
5C.2	Reverse Current (1)	Tamb = 15°C-30°C		100%	Ir	-		
		CV7026 Vr = 100V				-	20	uA
		CV7027 Vr = 200V				-	20	uA
		CV7028 Vr = 400V				-	20	uA
		CV7029 Vr = 600V				-	20	uA
		CV7030 Vr = 800V				-	20	uA
	GROUP B	Omitted						
	GROUP C							
5C.2	Reverse Current (2)	Tamb = 100°C min.	2.5	I	Ir			
		CV7026 Vr = 100V				-	300	uA
		CV7027 Vr = 200V				-	300	uA
		CV7028 Vr = 400V				-	300	uA
		CV7029 Vr = 600V				-	300	uA
		CV7030 Vr = 800V				-	300	uA
	GROUP D	Omitted						
	GROUP E							
11.5	Soldering			IC				
10.1	Lead fragility			IC				
10.2	Temperature cycling	Three cycles -40°C to +100°C		IC				
10.3	Climatic			IC				
11.3	Fatigue			IC				
11.4	Shock	Hammer angle = 60°		TA				
	Post Temperature Cycling, Climatic, Fatigue and Shock Tests							
8	Inoperatives		4.0					
5C.4	Forward Voltage Drop	If = .75A d.c Tamb = 15°C-30°C	4.0		Vf	-	1.1	V
5C.2	Reverse Current (2)	Tamb = 100°C min.	4.0		Ir			
		CV7026 Vr = 100V				-	500	uA
		CV7027 Vr = 200V				-	500	uA
		CV7028 Vr = 400V				-	500	uA
		CV7029 Vr = 600V				-	500	uA
		CV7030 Vr = 800V				-	500	uA

CV7026-30

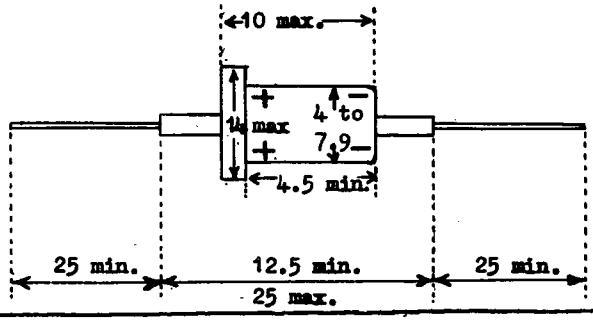
TESTS (Continued)

K1007	TEST	TEST CONDITIONS	AQL %	Insp. Level	Sym-bol	LIMITS Min.	LIMITS Max.	UNITS
	GROUP F							
13.3	LIFE	Note 1.		IA				
13.4	Storage Life (1)	Tamb = -40°C t = 150 hrs.		I				
13.5	Storage Life (2)	Tamb = 125°C t = 150 hrs.		I				
	Life Test End-peint - 1000 hrs. and Post Storage life tests (1) & (2)	Combined AQL for each group of tests	6.5					
5C.4	Forward Voltage Drop	If = 0.75A d.c. Tamb = 15°C-30°C	4.0		Vf	-	1.1	V
5C.2	Reverse Current (2)	Tamb = 100°C min.	4.0		Ir			
		CV7026, Vr = 100V				-	500	uA
		CV7027, Vr = 200V				-	500	uA
		CV7028, Vr = 400V				-	500	uA
		CV7029, Vr = 600V				-	500	uA
		CV7030, Vr = 800V				-	500	uA
	GROUP G							
	Re-test after 28 days holding period			100%				
8	Inoperatives	No voltages	0.5					
5C.4	Forward Voltage	as in Group A	1.0		Vf	-	1.0	V
5C.2	Reverse Current (1)	as in Group A	1.0		Ir	-	20	uA

NOTES

1. The device shall be tested in a half wave circuit, f = 50 c/s, with a resistive load at an ambient temperature not greater than 105°C and not less than 25°C. The value of I_F shall be not less than the value corresponding to the chosen ambient temperature according to the derating curve, fig.1 on page 2.

DIMENSIONAL DRAWING



Lead wires
26 SWG min.
18 SWG max.