MINISTRY OF SUPPLY (DCD)

VALVE ELECTRONIC (NR71, VR129) **CV1129**

Specification MAP/CV1129/Issue 5 Dated 17.9.47. To be read in conjunction with K1001.	SECURITY	
	Specification	Valve
	RESTRICTED	UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - H.F. Pentode

CATHODE - Indirectly heated

ENVELOPE - Glass-unmetallised

PROTOTYPE - MS/Pen T.

MARKING

See K1001/4

RATING

			Note
Heater Voltage	(V)	4.0	
Heater Current	(A)	1.0	
Max. Peak Anode Voltage	(kV)	4.0	
Max. Screen Voltage	(V)	125	
Max. Anode Dissipation	(W)	3.0	
Max. Screen Dissipation	(W)	1.0	
Max. Grid Resistance	(MΩ)	2.0	
Mutual Conductance	(mA/V)	2.8	A
Anode Impedance	(MΩ)	0.6	A

CAPACITANCES (pF)

Cae	5.0
Cge	12.0
Cag (max.)	0.02

BASE

B7

Pin	Electrode
1	No connection
2	Control grid
3	Suppressor grid
4	Heater
5	Heater
6	Cathode
7	Screen grid
T.C.	Anode

TOP CAP

See K1001/AI, D5.1

DIMENSIONS

See K1001/AI/D1.

Dimension		Min.	Max.
A	(mm)	120	126
B	(mm)	-	45

NOTE

A. Va = 250, Vg2 = 125, Vg1 = -2.0, Ia = 5.4mA.

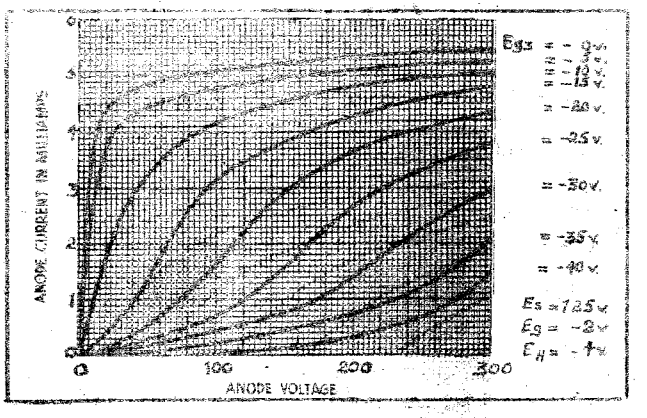
To be performed in addition to those applicable in K1001.

	Test Conditions					Test	Limits Min.	Limits Max.	No. Tested
a	See K1001/AIII								
	Links to H.P.	Links to L.P.	Links to E.			CAPACITANCES(pF)			
	TC1	1,3,4,5,6,7	2,8,9,10, TC2			Cae	-	6.0	6 per week
	2	1,3,4,5,6,7	8,9,10, TC1, TC2			Cge	-	15.0	
	TC1	2	1,3,4,5,6, 7,8,9,10, TC2			Cag	-	0.02	T.A.
	Vh	Va	Vg2	Vg1	Ia(mA)				
b	4.0	0	0	0	0	Ih (A)	0.9	1.1	100% or S
c	4.0	200	100	-1.5	-	Ia (mA)	3.2	6.4	100%
d	4.0	200	100	-1.5	-	Ig2 (mA)	-	2.0	100% or S
e	4.0	200	100	-1.5	-	gm (mA/V)	2.2	3.4	100%
	Peak grid swing ±0.5V. max.								
f	4.0	200	100	-1.5	-	Reverse Ig1(μA)	-	1.0	100%
g	4.0	200	100	-6.0	-	Ia (mA)	-	0.2	100%
h	4.0	-	100	Tied to cathode thro' 0.1MΩ	2.0	Va (V)	-	9.0	100%
j	4.0	3kV. thro' 1.0MΩ	100	-15	-	Ia (μA)	-	1.0	100%
k	4.0	4kV. thro' 1.0MΩ	100	-15	-	No discharge or sparking shall occur			100%

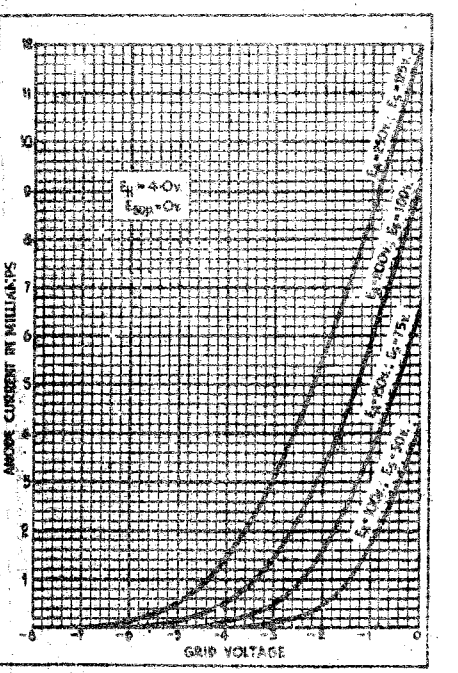
DATA

CV1129

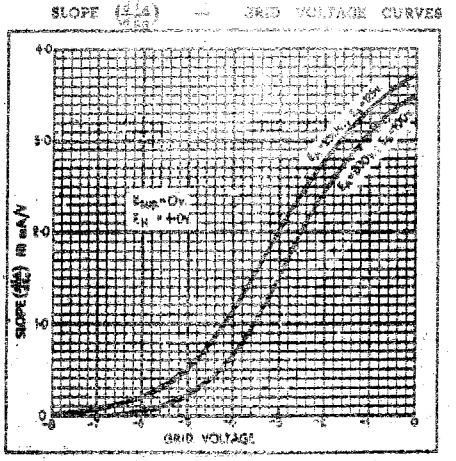
ANODE CURRENT — ANODE VOLTAGE CURVES



ANODE CURRENT — GRID VOLTAGE CURVES



SLOPE ($\frac{dI_a}{dE_g}$) — GRID VOLTAGE CURVES



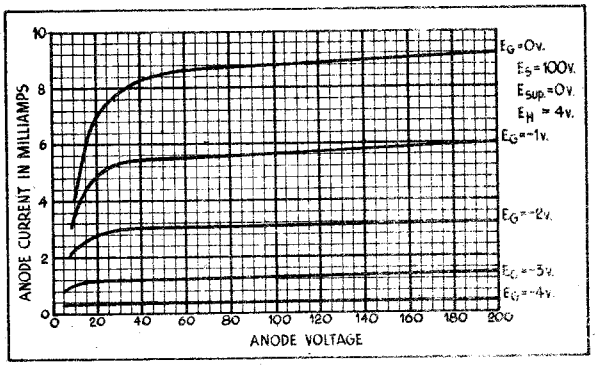
Source of Curves: Jonson Catalogue

NR/1/2/i.

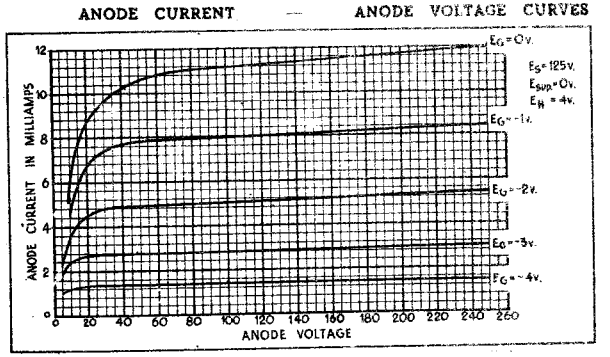
CV 1129

NR71.

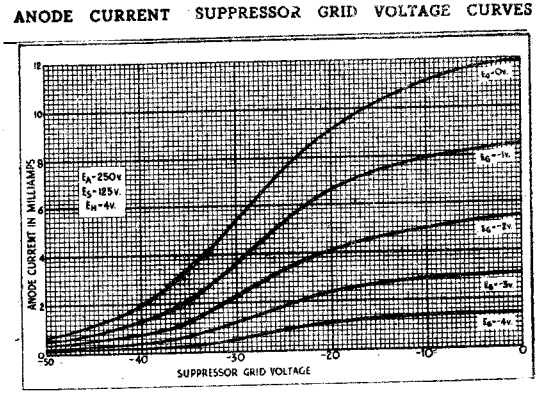
ANODE CURRENT — ANODE VOLTAGE CURVES



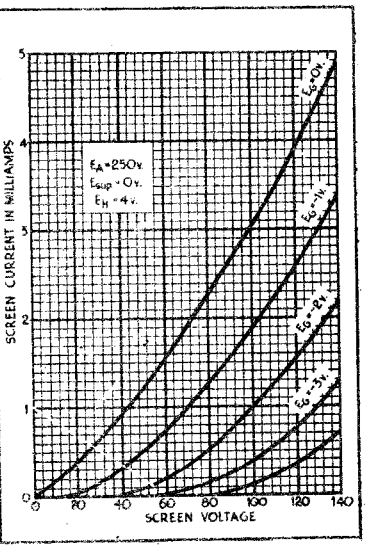
ANODE CURRENT — ANODE VOLTAGE CURVES



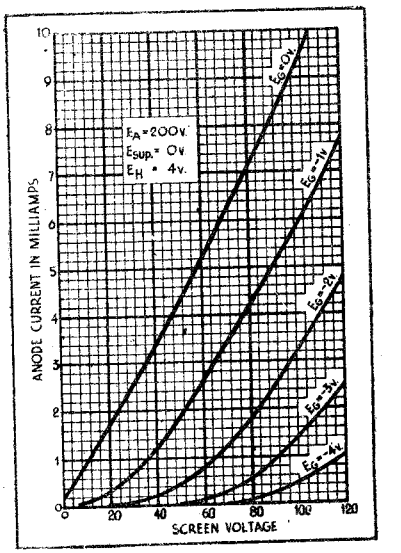
ANODE CURRENT SUPPRESSOR GRID VOLTAGE CURVES



SCREEN CURRENT — SCREEN VOLTAGE CURVES



ANODE CURRENT — SCREEN VOLTAGE CURVES



Source of Curves: Cossor Catalogue.