

VARIABLE-MU R.F. PENTODE

EF39

Variable-mu r.f. pentode with sliding screen characteristics, for use as controlled r.f. or i.f. amplifier.

HEATER

Suitable for series or parallel operation, a.c. or d.c.

V_h	6.3	V
I_h	200	mA

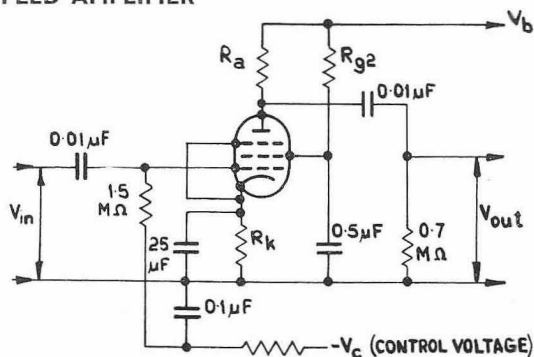
CAPACITANCES

C_{a-g1}	< 3.0	mpF
C_{in}	5.5	pF
C_{out}	7.2	pF

OPERATING CONDITIONS AS R.F. OR I.F. AMPLIFIER

$V_b = V_a$	200	200	250	250	V
R_{g2}	60	60	90	90	k Ω
V_{g2}	100	200	100	250	V
V_{g3}	0	0	0	0	V
V_{g1}	-2.5	-39	-2.5	-49	V
I_a	6.0	—	6.0	—	mA
I_{g2}	1.7	—	1.7	—	mA
g_m	2.2	0.0055	2.2	0.0045	mA/V
r_a	0.9	> 10	1.25	> 10	M Ω
R_k	325	325	325	325	Ω
V_{g1} max. ($I_{g1} = +0.3\mu A$)				-1.3	V

OPERATING CONDITIONS AS CONTROLLED GAIN R.C. COUPLED AMPLIFIER

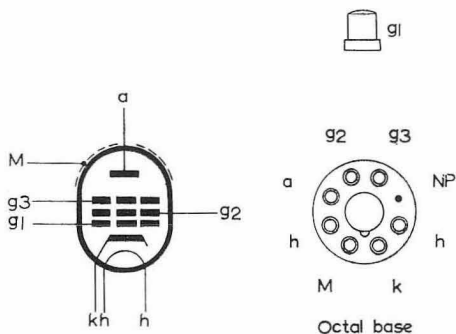


V_b (V)	R_a (k Ω)	R_{g2} (k Ω)	I_a (mA)	I_{g2} (mA)	R_k (k Ω)	$-V_c$ (V)	$V_{out\pm}$ ($V_{r.m.s.}$)	V_{out} V_{in}	D_{tot} (%)
250	200	800	0.87	0.26	1.75	0	10	106	2.7
250	200	800	0.69	0.21	1.75	5	10	40	2.7
250	200	800	0.55	0.17	1.75	10	10	23	3.7
250	200	800	0.37	0.11	1.75	18	10	11.6	4.8
250	200	800	0.17	0.05	1.75	25	10	6.7	8.8
250	100	400	1.6	0.45	1.0	0	10	85	2.5
250	100	400	1.22	0.36	1.0	5	10	36	2.7
250	100	400	0.92	0.28	1.0	10	10	20	4.1
250	100	400	0.57	0.18	1.0	18	10	9.2	6.1
250	100	400	0.36	0.11	1.0	25	10	5.5	9.5

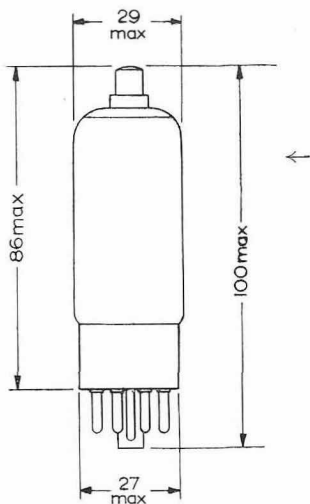
LIMITING VALUES

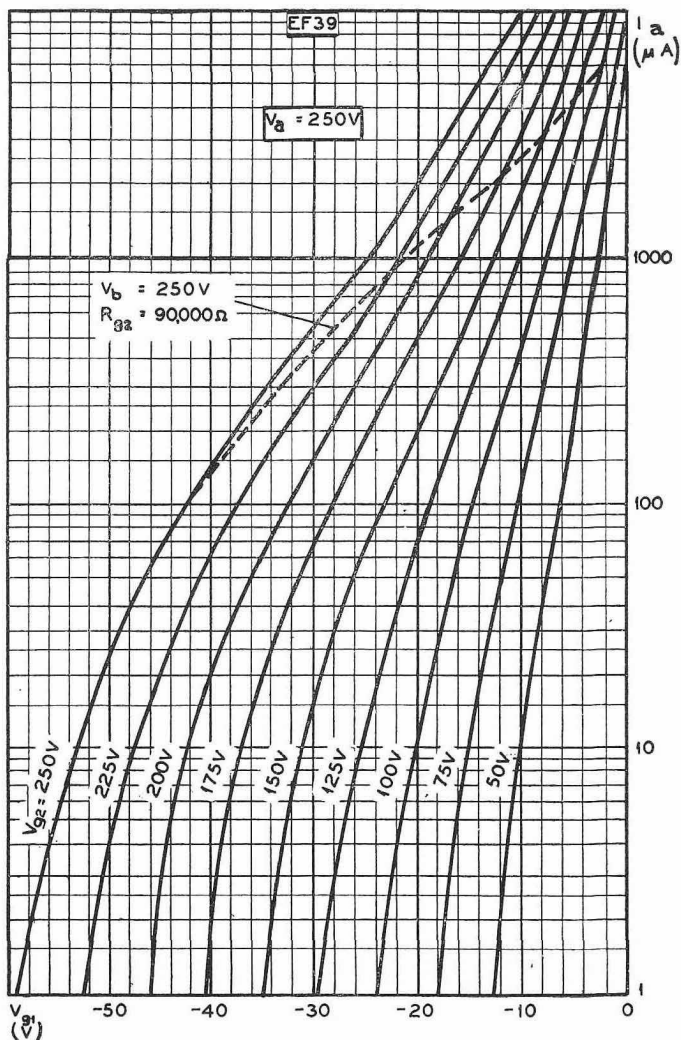
$V_{a(b)}$ max.	550	V
V_a max.	300	V
p_a max.	2	W
I_k max.	10	mA
$V_{g2(b)}$ max.	550	V
V_{g2} max. ($I_a = 6\text{mA}$)	125	V
V_{g2} max. ($I_a = 3\text{mA}$)	300	V
p_{g2} max.	300	mW
R_{g1-k} max.	3.0	$M\Omega$
V_{h-k} max.	100	V
R_{h-k} max.	20	$k\Omega$

6709

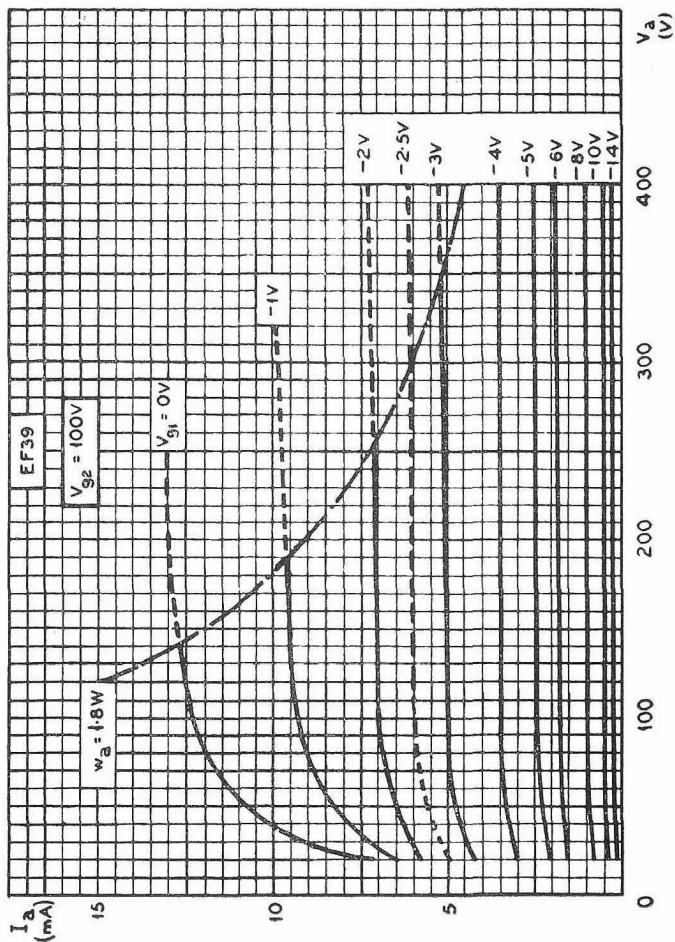


All dimensions in mm

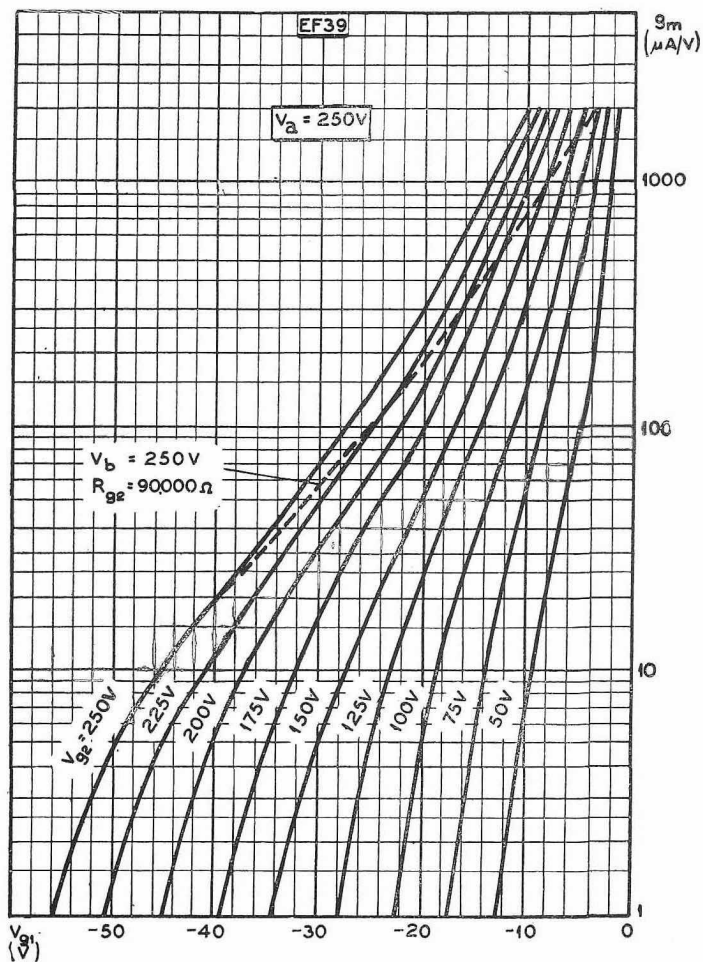




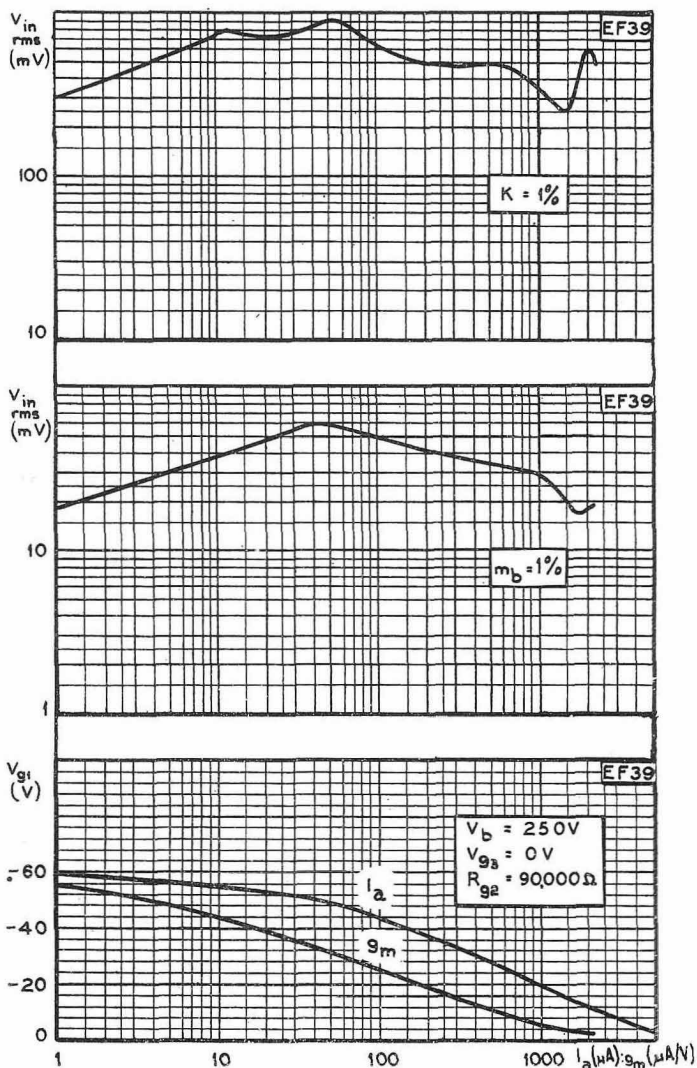
ANODE CURRENT PLOTTED AGAINST CONTROL-GRID VOLTAGE
WITH SCREEN-GRID VOLTAGE AS PARAMETER



ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE
WITH CONTROL-GRID VOLTAGE AS PARAMETER



MUTUAL CONDUCTANCE PLOTTED AGAINST CONTROL-GRID VOLTAGE WITH SCREEN-GRID VOLTAGE AS PARAMETER FOR ANODE VOLTAGE OF 250V



CROSS MODULATION, MODULATION HUM AND CONTROL CHARACTERISTICS FOR $V_b = 250V$