

4 VALVE DATA H TRANSMITTING VALVES AND PREFERRED TYPES MERCURY VAPOUR RECTIFIERS

QY2-100 Beam power tetrode with a maximum anode dissipation of 100 watts, primarily intended for use as a Class "C" R.F. amplifier at frequencies up to 60 Mc/s

FILAMENT

Thoriated tungsten

V_f 10.0 V I_f 5.0 A

MOUNTING POSITION

Vertical

CAPACITANCES

C_{in}	16.3	μF
C_{out}	14.0	μF
C_{a-g1}	<0.25	μF

CHARACTERISTICS

At $V_a=2,000$ V $V_{g2}=400$ V $I_a=50$ mA

g_m	3.75	mA/V
r_a	45	K Ω
μ_{g1-g2}	8.5	

LIMITING VALUES

V_a max.	2,000	V
$V_{a(pk)}$ max.	7,000	V
V_{g2}	400	V
$V_{g2(b)}$ max.	800	V
V_{g1} max.	-300	V
I_k max.	225	mA
$I_{k(pk)}$ max.	800	mA
I_{g2} max.	55	mA
I_{g1} max.	25	mA
$I_{g1(pk)}$ max.	75	mA
P_a max.	100	W
P_{g2} max.	15	W

Operating Frequency (Mc/s)	Max. Anode Voltage (V)	Max. Anode Input Power (V)
30	2,000	375
60	1,000	175

OPERATING CONDITIONS

As single R.F. power amplifier, Class "B" telephony

V_a	1,500	2,000	V
V_{g2}	400	400	V
V_{g1}	-60	-75	V
I_a	100	75	mA
I_{g2}	4	3	mA
$V_{drive(pk)}$	70	80	V
P_{drive}	<2	<2	W
P_{out}	50	50	W



TRANSMITTING VALVES AND MERCURY VAPOUR RECTIFIERS H

OPERATING CONDITIONS (contd.)

QY2-100
(contd.)

As single R.F. power amplifier (Class "C" unmodulated)
or as oscillator

V_a	1,250	1,500	2,000	V
V_{g2}	300	300	400	V
R_{g2}	27	40	36	K Ω
V_{g1}	-75	-90	-120	V
R_{g1}	6	7.5	12	K Ω
R_k	330	400	520	Ω
I_a	180	180	180	mA
I_{g2}	35	30	45	mA
I_{g1}	12	12	10	mA
$V_{drive(pk)}$	160	175	205	V
P_{drive}	1.7	1.9	1.9	W
P_{out}	170	210	275	W

*May be obtained from a fixed supply or from the anode supply through a series resistor of value shown. In the latter case provision must be made to ensure the $V_{g2(b)}$ does not exceed 800 V.

**May be obtained either from a fixed supply or by a grid or cathode resistor of value shown, or by a combination of these methods.

As single R.F. power amplifier, Class "C", grid modulated

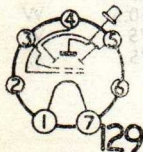
V_a	1,500	2,000	V
V_{g2}	400	400	V
V_{g1}	-140	-120	V
I_a	70	75	mA
I_{g2}	3	3	mA
$V_{drive(pk)}$ R.F.	145	120	V
$V_{drive(pk)}$ A.F.	60	60	V
P_{drive} R.F.	<2	<2	W
P_{mod}	<1	<1	W
P_{out}	40	50	W

As single R.F. power amplifier, Class "C", anode and screen modulated

V_a	1,250	1,600	V
V_{g2}	300	300	V
R_{g2}	27	43	K Ω
V_{g1}	-160	-160	V
R_{g1}	12.5	13.5	K Ω
I_a	150	150	mA
I_{g2}	35	30	mA
I_{g1}	13	12	mA approx.
$V_{drive(pk)}$ R.F.	250	250	V
P_{drive}	2.9	2.7	W approx.
P_{out}	140	180	W approx.

*May be obtained from a separate supply modulated simultaneously with the anode supply, or from a modulated anode supply through a series resistor of value shown.

**May be obtained from a fixed supply or by grid resistor of value shown.



BASE :
MVH15
Giant 7-Pin

DIMENSIONS :
L=192 mm
D=66 mm

