TYPE 9GB8

GENERAL

This triode beam tetrode valve combination has a medium mu triode and a high slope beam tetrode and is intended for use in the Video Output or Sync Separator stages of AC/DC Mains Television receivers having series connected heaters.

RATING

		Tetrode	Triode
Heater Voltage (volts)	V_h	9.4	—
Heater Current (amps)	I_h	0.3	—
Maximum Anode Voltage (volts)	$V_{a(max)}$	250	250
Maximum Screen Voltage (volts)	$V_{g_2(max)}$	250	—
Mutual Conductance (mA/V)	g_m	†7.5	*3.4
Amplification Factor	μ		*18
Maximum Anode Dissipation (watts)	$P_{a(max)}$	3	2
Maximum Screen Dissipation (watts)	$P_{g_2(max)}$	1.0	
Maximum Heater to Cathode Voltage (volts r.m.s.)	$V_{h-k\ (max)}$	‡150	

Notes

* $V_a = 200$ volts. $I_a = 10$mA.

† $V_a = 170$ volts. $V_{g_2} = 170$ volts. $I_a = 10$mA. $V_{g_1} = -2{\cdot}1$ volts.

‡ Measured with respect to the higher potential heater pin.

INTER-ELECTRODE CAPACITANCES (pF)

Grid 1/Earth	$c_{g_1,E}$	‖7.9	¶9.2
Anode q/Earth	$c_{aq,E}$	3.2	4.5
Grid 1/Anode q	$c_{g_1,aq}$	0.03	0.048
Grid t/Earth	$c_{gt,E}$	3.6	4.6
Anode t/Earth	$c_{at,E}$	2.6	3.6
Grid t/Anode t	$c_{gt,a}$	2.7	3.0
Grid t/Anode q	$c_{gt,aq}$	0.0068	0.0074
Grid 1/Anode t	$c_{g_1,at}$	0.0083	0.010
Anode q/Anode t	$c_{aq,at}$	0.037	0.037

‖ Measured with holder capacity balanced out.

¶ Measured to include capacity of Carr-Fastener ceramic holder without screen or skirt. If a skirted holder is used the total C_{g_1-aq} is 0.035 μF.

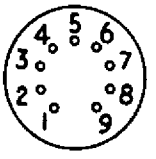
DIMENSIONS

Maximum Overall Length (mm)	56.0
Maximum Diameter (mm)	22.2
Maximum Seated Height (mm)	49.0
Approximate Nett Weight (ozs)	⅛
Approximate Packed Weight (ozs)	¾

MOUNTING POSITION—Unrestricted

BASE—Noval (B9A) E9-1

BULB T6½



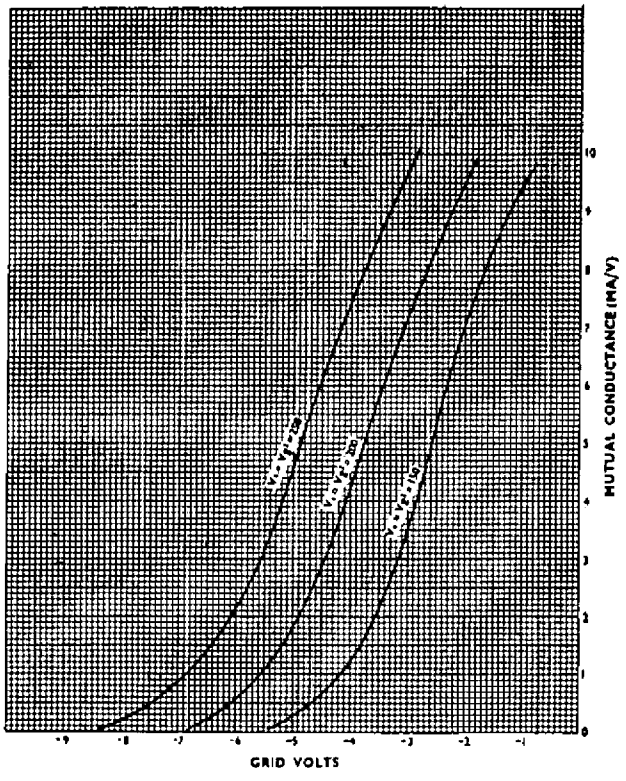
Viewed from Free End of pins

CONNECTIONS 9DA

Pin 1	Triode Anode	a_t
Pin 2	Triode Grid	g_t
Pin 3	Triode Cathode	k_t
Pin 4	Heater	h
Pin 5	Heater	h
Pin 6	Tetrode Anode	a_q
Pin 7	Tetrode, Screen Grid	g_2
Pin 8	Tetrode Control Grid	g_1
Pin 9	Tetrode Cathode, Beam Plates Shield	$k_{q,bp,s}$

TYPE 9GB8

AVERAGE CHARACTERISTIC CURVES



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