MAZDA

6C10

TRIODE HEXODE FREQUENCY CHANGER

Indirectly heated—for parallel operation

RATING

Heater Voltage (volts)	V_h	6.3	
Heater Current (amps)	I_h	0.23	
		Triode	Hexode
Maximum Anode Voltage (volts)	$V_{a(max)}$	175	250
Maximum Screen Voltage (volts)	V_{g2}		250
Maximum Mean Cathode Current (mA)		6	7
Maximum Anode Watts	P_a	0.8	1.5
Maximum Screen Watts	P_{g2}		0.3
Mutual Conductance (mA/V)	g_m	* 2.8	
Amplification Factor	μ	* 22	
Maximum Potential Heater/Cathode (volts D.C.)		50	

* Taken at $V_{a(t)} = 100$; $V_{g(t)} = 0$.

INTER-ELECTRODE CAPACITANCES

(TRIODE SECTION)

Anode/earth	(μμF)	$C_{out(t)}$	2.3
Anode/grid	(μμF)	$C_{a(t),\ g(t)}$	1.2
Grid/earth	(μμF)	$C_{in(t)}$	5.5

(HEXODE SECTION)

Anode/earth	(μμF)	$C_{a(h),\ earth}$	9.2
Anode/grid 1	(μμF)	$C_{a(h),\ g1(h)}$	0.1
Grid 1/earth	(μμF)	$C_{g1(h),\ earth}$	4.0
Hexode grid/triode grid	(μμF)	$C_{g1(h),\ g(t)}$	0.35

Earth denotes electrodes of any second valve section and the remaining earthy potential electrodes of the section under measurement, heater and shield joined to cathode.

DIMENSIONS

Maximum Overall Length	(mm)	60
Maximum Diameter	(mm)	22
Maximum Seated Height	(mm)	53

MOUNTING POSITION - Unrestricted.

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TYPICAL OPERATION

(TRIODE SECTION)

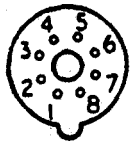
Anode Voltage (volts)	$V_{a(t)}$	90
Approximate Anode Current (mA)	$I_{a(t)}$	4.8

(HEXODE SECTION)

Anode Voltage (volts)	$V_{a(h)}$	250
Initial Screen Voltage (volts)	$V_{g2(h)}$	85
Grid Bias (volts - negative)	$V_{g1(h)}$	-2
Conversion Conductance (μA/V)	g_c	750
Approximate Anode Current (mA)	$I_{a(h)}$	3
Approximate Screen Current (mA)	$I_{g2(h)}$	3

BULB - Clear

BASE - B8A



Viewed from free end of pins.

CONNEXIONS

Pin 1	Heater	h
Pin 2	Hexode anode	a_h
Pin 3	Triode anode	a_t
Pin 4	Triode grid and hexode grid 3	$g_{1(t)}, g_{3(h)}$
Pin 5	Hexode grid 2 and grid 4	$g_{2(h)}, g_{4(h)}$
Pin 6	Hexode grid 1	$g_{1(h)}$
Pin 7	Cathode and shield	k & s
Pin 8	Heater	h