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6AB9

TWIN TETRODE TUBE

The Matsushita's 6AB9 is a twin tetrode with a 10 pin base, for using as VHF RF amplifiers and VHF autodyne mixers.

General Data

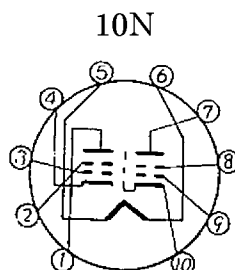
Mechanical Data

Cathode	Coated unipotential
Outline drawing	See outline drawing
Bulb	T-6½
Base	E10-61
Maximum diameter	0.750" to 0.875"
Maximum seated height	1.660"
Minimum seated height	1.460"
Maximum overall length	2.190"

Pin connections

Pin 1	Plate of unit No.2	Pin 6	Heater
Pin 2	Grid No.2 of unit No.2	Pin 7	Plate of unit No.1
Pin 3	Grid No.1 of unit No.2	Pin 8	Grid No.2 unit No.1
Pin 4	Cathode of unit No.2	Pin 9	Grid No.1 of unit No.1
Pin 5	Heater	Pin10	Cathode of unit No.1
			Internal shield

Basing



Mounting Position Any

Electrical Data

Heater characteristics

Heater voltage	6.3	volts
Heater current	365	ma

Maximum Heater-cathode Voltage (Design Maximum Values)

Heater negative with respect to cathode :

DC	200	volts
Total DC and peak	200	volts

Heater positive with respect to cathode:

DC	100	volts
Total DC and peak	200	volts

Direct Inter-electrode Capacitances (with external shield)

	<u>Unit No.1</u>	<u>Unit No.2</u>	
Grid No.1 to Plate	0.055max.	0.055max.	$\mu\mu\text{f}$
Input: 2g1 to (h+2k+2g2+1k, i.s.+e.s.)	—	5.7	$\mu\mu\text{f}$
1g1 to (h+1k,i.s.+1g2+e.s.)	5.7	—	$\mu\mu\text{f}$
Output: 2p to (h+2k+2g2+1k,i.s.+e.s.)	—	2.7	$\mu\mu\text{f}$
1p to (h+1k,i.s.+1g2+e.s.)	2.7	—	$\mu\mu\text{f}$
Heater to cathode	3.0	3.0	$\mu\mu\text{f}$

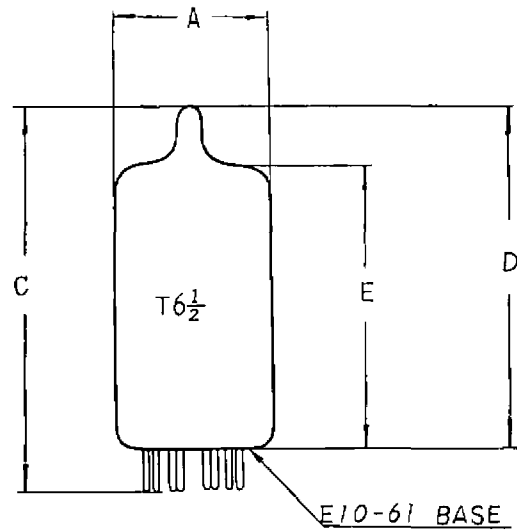
Maximum Ratings (Design Maximum Values)

Maximum plate voltage	250	volts
Maximum grid No.2 supply voltage	180	volts
Maximum grid No.2 voltage	See Grid No.2 Rating chart.	
Maximum Plate dissipation (Both plates)	3.5	watts
Maximum plate dissipation	2.0	watts
Maximum grid No.2 dissipation	0.5	watts
Maximum cathode current	20	ma

Typical operating Conditions and Characteristics (Each unit)

Plate voltage	125	volts
Grid No.2 voltage	80	volts
Grid No.1 voltage	-1	volts
Plate current	8	ma
Grid No.2 current	2	ma
Transconductance.....	10,000	μmhos
Plate resistance (approx.)	0.11	megohms
Grid No.1 voltage for $I_b=20 \mu\text{a}$	-3.3	volts

Outline drawing



Ref.	inches			millimeters			notes
	min.	nom.	max.	min.	nom.	max	
A	0.750	—	0.875	19.1	—	22.2	1
C	—	—	2.190	—	—	55.56	
D	—	—	1.940	—	—	49.21	
E	1.460	1.562	1.660	37.4	39.7	42.2	2

Notes :

1. The minimum applies in zone starting 0.375" (9.52mm) from base seat.
2. Measured from base seat to bulb-top line as determined by ring gauge of 7/16" (11.1mm) internal diameter.