

SEMI-REMOTE-CUTOFF PENTODE TYPES 3JD6, 4JD6 AND 6JD6

The 3JD6, 4JD6 and 6JD6 are semi-remote-cutoff, 9-pin miniature, frame-grid pentode types designed for service in television receiver I.F. amplifier stages. They feature very high transconductance and low interelectrode capacitance values. The cathode has 2 terminals to increase input impedance at high frequencies. Grid 3 has a separate pin to facilitate grounding. Their semi-remote cutoff characteristic is desirable for use in a g c controlled stages. They have a specially designed internal shield to eliminate the need for an external shield.

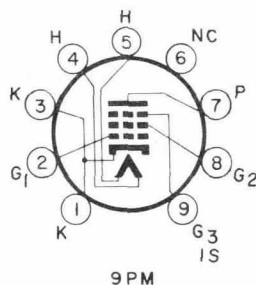
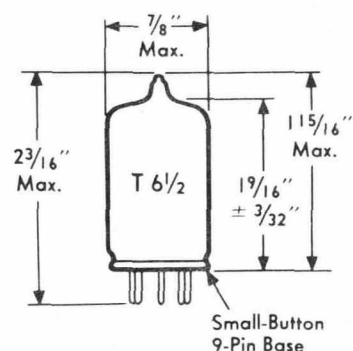
The 3JD6 and 4JD6 have been designed for use in receivers which employ series connected heaters, especially in television receivers where the picture-tube heater is in series with other heaters. When each is employed in this type of circuit with other tubes similarly designed having the same heater current rating, heater voltage surges across individual tubes are minimized inasmuch as heater warm-up characteristic is controlled.

ELECTRICAL

Cathode.....	Coated Unipotential		
Heater:	3JD6	4JD6	6JD6
Voltage (ac or dc) . . .	3.5	4.5	6.3±0.6
Current	0.60±0.040	0.45±0.030	0.30
Warm-up Time			
(Note 1).....	11	11	—
Direct Interelectrode Capacitances:			
		Unshielded	
Grid 1 to Plate		0.019	max. pf
Input		8.2	pf
Output		3.0	pf

MECHANICAL

Bulb	T-6½
Base	Miniature 9-Pin (JEDEC E9-1)
Outline	6-2
Basing	9PM
Mounting Position	Any



RATINGS

Design Maximum Values		
Plate Voltage	330	max. Volts
Grid 2 Supply Voltage	330	max. Volts
Grid 2 Voltage	See JEDEC J5-C4-2 Rating Curve	
Plate Dissipation	2.5	max. Watts
Grid 2 Dissipation	0.6	max. Watts
Grid 1 Positive Bias Value	0	max. Volts
Grid 1 Circuit Resistance:		
Cathode Resistor Bias	1	max. Megohm
Fixed Bias	0.25	max. Megohm
Heater-Cathode Voltage:		
Heater Negative with Respect to Cathode:		
Total DC and Peak	200	max. Volts
Heater Positive with Respect to Cathode:		
Total DC and Peak	200	max. Volts
DC Component	100	max. Volts

TYPICAL OPERATION AND CHARACTERISTICS

Plate Voltage	125	Volts
Grid 3 (Suppressor)	Connected to Cathode at Socket	
Grid 2 Voltage	125	Volts
Cathode Bias Resistor	56	Ohms
Plate Resistance	0.16	Megohm
Transconductance	14000	μmhos
Plate Current	15	Ma.
Grid 2 Current	4.0	Ma.
Grid 1 Cutoff Bias (Note 2)	-4.5	Volts

NOTES

1. Heater Warm-up Time is defined as the time required for the voltage across the heater to reach 80% of its rated value after applying 4 times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three times rated heater voltage divided by rated heater current.
2. For transconductance of 600 μmhos.

