SHARP-CUTOFF PENTODE TYPES 3JC6, 4JC6 AND 6JC6

The 3JC6, 4JC6 and 6JC6 are sharp-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 is provided with 2 terminals to increase input impedance at high frequencies. Grid 3 is connected to a separate pin to facilitate grounding. They have a specially designed internal shield to eliminate the need for an external shield.

The 3JC6 and 4JC6 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

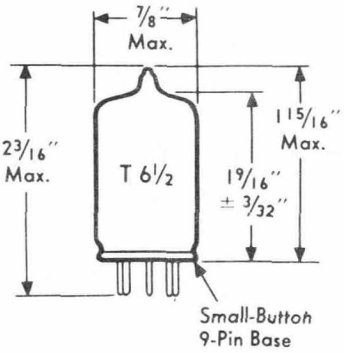
	3JC6	4JC6	6JC6	
Cathode	Coated Unipotential			
Heater:				
Voltage (ac or dc)	3.5	4.5	6.3 ± 0.6	Volts
Current	0.60 ± 0.040	0.45 ± 0.030	0.30	Ampere
Warm-up Time (Note 1)	11	11	–	Seconds

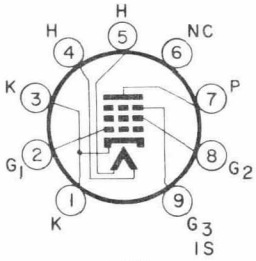
Direct Interelectrode Capacitances:

	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





9PM

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 Chart		
Plate Dissipation	2.5	max.	Watts
Grid 2 Input	0.6	max.	Watt
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			
DC + Peak	200	max.	Volts
DC Component	100	max.	Volts

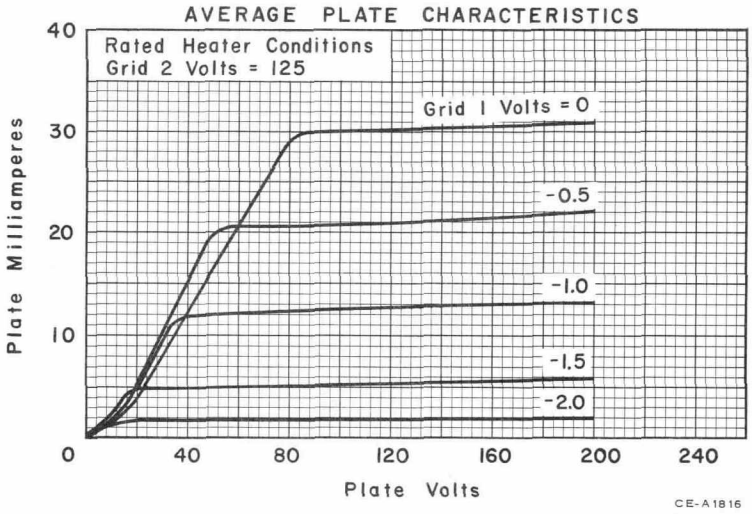
CHARACTERISTICS AND TYPICAL OPERATION

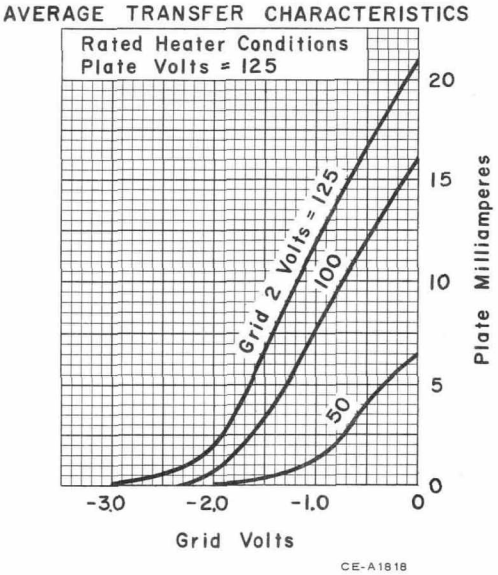
Plate Voltage	125	Volts
Grid 3 (Suppressor)	Connected to cathode at socket	
Grid 2 Voltage	125	Volts
Cathode-Bias Resistor	56	Ohms
Plate Resistance (Approx.)	0.18	Megohm
Transconductance	15000	μmhos
Grid 1 Cutoff Bias (Note 2)	–3.0	Volts
Plate Current	13	Ma.
Grid 2 Current	3.2	Ma.

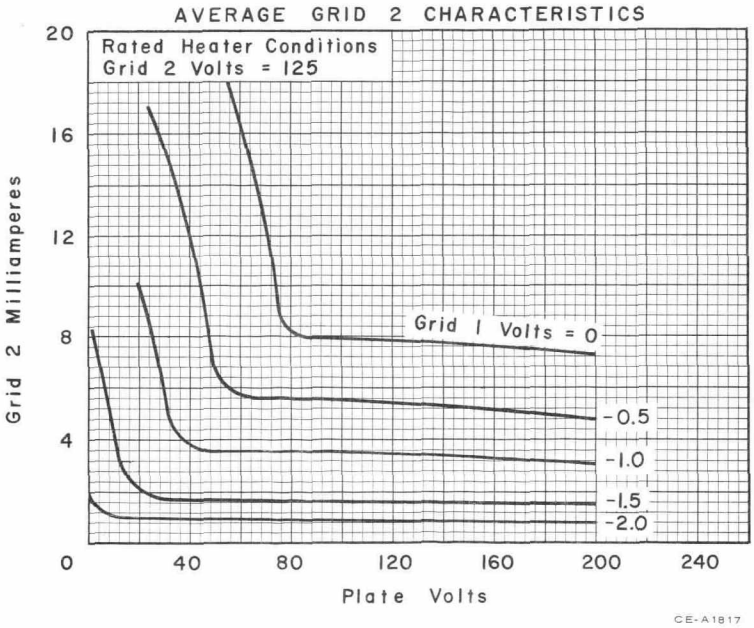
NOTES

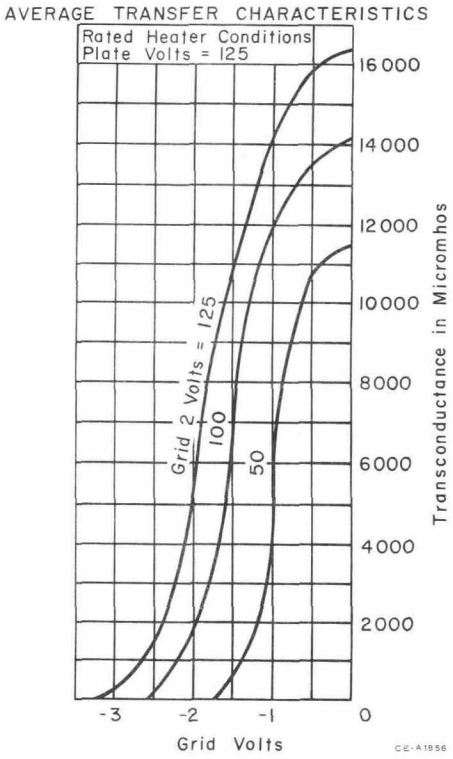
1. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of its rated value after applying 4 times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to 3 times rated heater voltage divided by rated heater current.

2. For plate current of 100 microamperes.









The information contained herein is supplied without assuming responsibility for infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Westinghouse Electric Corporation.