

TWIN TRIODE TYPE 6GU7

The 6GU7 is a 9-Pin miniature medium-mu twin triode type designed for service in matrixing circuits of color television receivers. Its applications also include multivibrators, synchronizing amplifiers, oscillators, mixers, and industrial controls. The tube has separate cathode terminals for each triode.

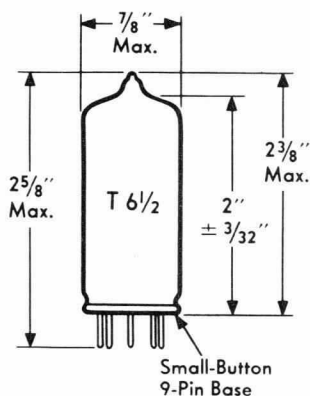
The 6GU7 has been designed for use in receivers which employ series-connected heaters. When it is employed in this type of circuit heater voltage surges are minimized inasmuch as the heater warm-up characteristic is controlled.

ELECTRICAL

Cathodes	Coated Unipotential		
Heater:			
Voltage (ac or dc)	6.3	Volts	
Current	0.60 ± 0.04	Ampere	
Warm Up-Time (Note 1)	11	Seconds	
Direct Interelectrode Capacitances (Unshielded):			
	Unit 1	Unit 2	
Grid to Plate	3	3	pF
Input	3.4	3.6	pF
Output	0.44	0.34	pF
Plate Unit 1 to Plate Unit 2	1		pF

MECHANICAL

Bulb	T-6½
Base	Miniature 9-Pin (JEDEC E9-1)
Outline	EIA 6-3
Basing	EIA 9LP
Mounting Position	Any



CLASS A AMPLIFIER

MAXIMUM RATINGS PER UNIT

Design Maximum Values		
Plate Voltage	330 max.	Volts
Positive Grid Voltage	0 max.	Volts
Plate Dissipation	3 max.	Watts
Heater-Cathode Voltage:		
Heater Positive with Respect to Cathode:		
DC Component	100 max.	Volts
Total DC and Peak	200 max.	Volts
Heater Negative with Respect to Cathode:		
Total DC and Peak	200 max.	Volts
Grid Circuit Resistance:		
Fixed Bias	1.0 max.	Megohm

TYPICAL OPERATING CHARACTERISTICS

Plate Voltage	250	Volts
Grid Voltage	-10.5	Volts
Amplification Factor	17	-
Plate Resistance (Approx.)	5500	Ohms
Transconductance	3100	μmhos
Plate Current	11.5	mA
Plate Current at $E_{C1} = -14$	4	mA
Grid Cutoff Bias (Note 2)	-23	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 plate current of 50 microamperes.

