

MEDIUM-MU TRIODE, BEAM-PENTODE TYPE 17JZ8A

The 17JZ8A is a medium-mu triode, beam-power pentode in a T-9 bulb with a 12-Pin button base. It is designed to perform as the vertical deflection oscillator and amplifier in television receivers. The 17JZ8A is a higher plate current version of the 17JZ8 to ensure adequate vertical deflection.

The 17JZ8A has controlled heater warm-up time to ensure reliability in series heater circuits.

ELECTRICAL

Cathodes	Coated Unipotential
Heater:	
Voltage (ac or dc)	16.8 Volts
Current	0.45 ± 0.03 Ampere
Warm-up Time (Note 1)	11 Seconds
Direct Interelectrode Capacitances (Unshielded):	
	Pentode Triode
Grid 1 to Plate	0.34 3.6 pF
Input (G1 to H, K, G2 & BP)	11 2.2 pF
Output (P to H, K, G2 & BP)	7.0 0.7 pF

MECHANICAL

Bulb	T-9
Base	12-Pin Button (JEDEC E12-70)
Outline	9-58
Basing	12DZ
Mounting Position	Any

MAXIMUM RATINGS

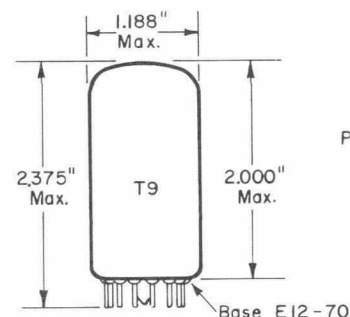
Design Maximum Values	Triode as Vertical Deflection Oscillator (Note 2)	Pentode as Vertical Deflection Amplifier (Note 2)		
Plate Voltage	250	250	max.	Volts
Peak Positive Pulse				
Plate Voltage (Abs.Max.)	—	2000	max.	Volts
Grid 2 Voltage	—	200	max.	Volts
Peak Negative Pulse				
Grid Voltage	400	150	max.	Volts
Plate Dissipation	1.0	8	max.	Watts
Grid 2 Dissipation	—	2	max.	Watts
Cathode Current	20	70	max.	mA
Peak Cathode Current	70	245	max.	mA
Heater-Cathode Voltage				
Heater Negative with Respect to Cathode				
Total DC and Peak	200	200	max.	Volts
Heater Positive with Respect to Cathode				
DC Component	100	100	max.	Volts
Total DC and Peak	200	200	max.	Volts
Grid 1 Circuit Resistance:				
Fixed Bias	1.0	1.0	max.	Megohms
Cathode Resistor Bias	2.2	2.2	max.	Megohms

CHARACTERISTICS AND TYPICAL OPERATION

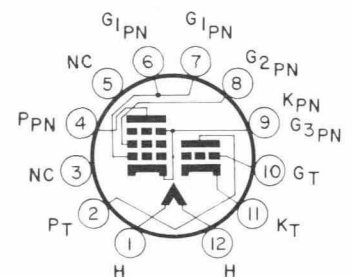
	Triode	Pentode	
Plate Voltage (Note 3)	150	120	45 Volts
Grid 2 Voltage (Note 3)	—	110	110 Volts
Grid Voltage	—5	—8	0 Volts
Plate Current	5.5	56	132 mA
Grid 2 Current	—	3.5	19 mA
Plate Resistance	8500	13100	— Ohms
Transconductance	2350	7700	— μ mhos
Amplification Factor	20	—	—
Grid Cutoff Voltage	—11 (Note 4)	—25 (Note 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 four 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 operation in a 525-line, 30-frame system as described in "Standards of Good Engineering Practice for Television Broadcasting Station, Federal Communications Commission". The duty cycle of the voltage pulse must not exceed 15 per cent of one scanning cycle.
3. Pentode zero bias values must only be applied for a short interval, (2 seconds max.) to prevent damage.
4. For Plate Current of 10 microamperes.
5. For Plate Current of 100 microamperes.



9-58



12 DZ

