



# 33HE7

## DUODECAR TYPE DIODE - PENTODE

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### DESCRIPTION

The 33HE7 is a duodecar type containing a high-perveance diode and a beam-power pentode. The diode is intended for service as the damping diode and the pentode as the horizontal-deflection amplifier in television receivers.

Except for heater characteristics, the 33HE7 is identical to Types 6HE7, 12HE7, 38HE7 and 58HE7 described in JEDEC Release numbers 4656B, 4656A, 4656 and 4656D respectively.

### ELECTRICAL DATA

Cathode .....	Coated Unipotential
Heater Characteristics and Ratings	
Heater Voltage, AC and DC (Note 1) .....	33.6 Volts
Heater Current (Note 2) .....	0.45±0.03 Amperes
Heater Warm-up Time, Average (Note 3) .....	11 Seconds

### NOTES

1. Heater voltage for a bogey tube at  $I_f=0.45$  amperes.
2. The equipment designer should design the equipment so that heater current is centered at the specified bogey value, with heater supply variations restricted to maintain heater current within the specified tolerance.
3. The time required for the voltage across the heater to reach 80 per cent of the bogey value after applying 4 times the bogey heater voltage to a circuit consisting of the tube heater in series with a resistance equal to 3 times the bogey heater voltage divided by the bogey heater current.