

Medium-Mu Triode— Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage (AC or DC)	6.3	volts
Current	$0.45 \pm 6\%$	amp
Warm-up time (Average)	11	sec

Direct Interelectrode Capacitances:

	Without External Shield	With External Shield ^a	
<i>Triode Unit:</i>			
Grid to plate	1.7	1.7	μf ←
Grid to cathode, pentode cathode & pentode grid No.3 & internal shield, and heater.	3	3.2	μf
Plate to cathode, pentode cathode & pentode grid No.3 & internal shield, and heater.	1.4	1.9	μf
<i>Pentode Unit:</i>			
Grid No.1 to plate.	0.02 max.	0.01 max.	μf
Grid No.1 to cathode & grid No.3 & internal shield, grid-No.2, and heater.	5	5	μf
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater . . .	2.6	3.4	μf
Heater to cathode (Each unit) .	3	3 ^b	μf

Characteristics, Class A₁ Amplifier:

	Triode Unit	Pentode Unit	
Plate-Supply Voltage.	150	125	volts
Grid-No.2 Voltage	—	125	volts
Grid-No.1 Voltage	—	—1	volt
Cathode Resistor.	56	—	ohms
Amplification Factor.	40	—	
Plate Resistance (Approx.). . . .	5000	200000	ohms ←
Transconductance.	8500	6400	μmhos
Plate Current	18	12	ma
Grid-No.2 Current	—	4	ma
Grid-No.1 Voltage (Approx.) for plate $\mu\text{a} = 10$	—12	—9	volts

← Indicates a change.



6EA8

Mechanical:

Operating Position. Any
 Maximum Overall Length. 2-3/16"
 Maximum Seated Length. 1-15/16"
 Length, Base Seat to Bulb Top (Excluding tip). . . 1-9/16" $\pm$ 3/32"
 Diameter. 0.750" to 0.875"
 Dimensional Outline. See *General Section*
 Bulb. T6-1/2
 Base. Small-Button Noval 9-Pin (JEDEC No.E9-1)
 Basing Designation for BOTTOM VIEW. 9AE

Pin 1 - Triode Plate

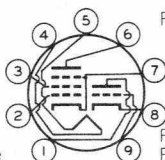
Pin 2 - Pentode
 Grid No.1

Pin 3 - Pentode
 Grid No.2

Pin 4 - Heater

Pin 5 - Heater

Pin 6 - Pentode Plate



Pin 7 - Pentode

Cathode,

Pentode

Grid No.3,

Internal

Shield

Pin 8 - Triode Cathode

Pin 9 - Triode Grid

AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

	Triode Unit	Pentode Unit	
PLATE VOLTAGE	330 max.	330 max.	volts
GRID-No.2 (SCREEN-GRID)			
SUPPLY VOLTAGE.	-	330 max.	volts
GRID-No.2 VOLTAGE	-	See Grid-No.2 Input	

Rating Chart at front of Receiving Tube Section

GRID-No.1 (CONTROL-GRID)

VOLTAGE:

Positive-bias value 0 max. 0 max. volts

GRID-No.2 INPUT:

For grid-No.2 voltages

up to 165 volts - 0.55 max. watt

For grid-No.2 voltages

between 165 and

330 volts - See Grid-No.2 Input

Rating Chart at front of Receiving Tube Section

→ PLATE DISSIPATION 2.5 max. 3.1 max. watts

PEAK HEATER-CATHODE

VOLTAGE:

Heater negative with

respect to cathode. 200 max. 200 max. volts

Heater positive with

respect to cathode. 200^c max. 200^c max. volts

^a With external shield JEDEC No.315 connected to cathode of unit under test except as noted.

^b With external shield JEDEC No.315 connected to ground.

^c The dc component must not exceed 100 volts.

→ Indicates a change.

