

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 ± 6%	amp
Warm-up time (Average)	11	sec

Direct Interelectrode Capacitances:

	<i>Without External Shield</i>	<i>With External Shield^a</i>	
Triode Unit:			
Grid to plate	1.7	1.7	μμf
Grid to cathode and heater.	3	3.2	μμf
Plate to cathode and heater.	1.6	1.1	μμf

Pentode Unit:

Grid No.1 to plate.	0.02 max.	0.1 max.	μμf
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater	5	5	μμf
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater.	2.6	3.4	μμf
Heater to cathode (Each unit)	3.6	3.6 ^b	μμf

Characteristics, Class A₁ Amplifier:

	<i>Triode Unit</i>	<i>Pentode Unit</i>	
Plate Supply Voltage.	150	125	volts
Grid-No.2 Supply Voltage.	—	125	volts
Grid-No.1 Voltage	—	—1	volt
Cathode Resistor.	56	—	ohms
Amplification Factor.	40	—	
Plate Resistance (Approx.)	5000	80000	ohms
Transconductance.	8500	6400	μmhos
Plate Current	18	12	ma
Grid-No.2 Current	—	4	ma
Grid-No.1 Voltage (Approx.) for plate $\mu a = 10$	—12	—9	volts
Cathode Warm-Up Time ^c	35	—	sec

Mechanical:

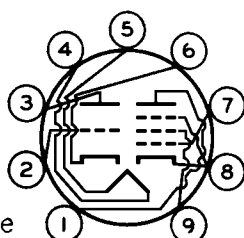
Operating Position.	Any
Maximum Overall Length.	2-3/16"
Maximum Seated Length	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip)	1-9/16" ± 3/32"



6EU8

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. 9JF

Pin 1 - Pentode Plate
 Pin 2 - Triode
 Grid
 Pin 3 - Triode
 Plate
 Pin 4 - Heater
 Pin 5 - Heater
 Pin 6 - Triode Cathode



Pin 7 - Pentode
 Grid No.1
 Pin 8 - Pentode
 Cathode,
 Grid No.3,
 Internal
 Shield
 Pin 9 - Pentode
 Grid No.2

AMPLIFIER — Class A₁

Maximum Ratings, Design-Center 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 <i>Grid-No.2 Input Rating Chart</i> 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 <i>Grid-No.2 Input Rating Chart</i> at front of Receiving Tube Section
PLATE DISSIPATION.	3 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 ^d max.	200 ^d max. volts

Maximum Circuit Values:

	Triode Unit	Pentode Unit
Grid-No.1-Circuit Resistance . .	0.1 max.	0.1 max. megohm

^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 time required for the transconductance to reach 6500 μ mhos when the tube is operated from a cold start with dc plate volts = 100, grid volts = 0, and heater volts = 5.5.

^d The dc component must not exceed 100 volts.

