

**6EH8****6EH8****TRIODE-PENTODE CONVERTER**

9-PIN MINIATURE TYPE

*With heater having controlled warm-up time***GENERAL DATA****Electrical:**

Heater, for Unipotential Cathode:

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 Shield⁰</i>	
Triode Unit:			
Grid to plate	1.8	1.8	μf
Grid to cathode & pentode grid No.3 & internal shield, and heater.	2.8	2.8	μf
Plate to cathode & pentode grid No.3 & internal shield, and heater.	1.7	2.2	μf
Pentode Unit:			
Grid No.1 to plate.	0.02 max.	0.012 max.	μf
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater.	4.8	4.8	μf
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater . . .	2.4	3.2	μf
Heater to cathode & pentode grid No.3 & internal shield	8.5	8.5 [•]	μf

Characteristics, Class A₁ Amplifier:

	<i>Triode Unit</i>	<i>Pentode Unit</i>	
Plate Voltage	125	125	volts
Grid-No.2 Voltage	—	125	volts
Grid-No.1 Voltage	-1	-1	volt
Amplification Factor	40	—	
Plate Resistance (Approx.)	—	0.17	megohm
Transconductance.	7500	6000	μmhos
Plate Current	13.5	12	ma
Grid-No.2 Current	—	4	ma
Grid-No.1 Voltage (Approx.) for plate μa = 20	-9	-10	volts

Mechanical:

Operating Position.	Any
Maximum Overall Length.	2-3/16"

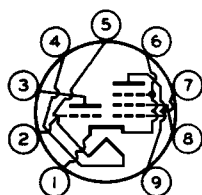


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TRIODE-PENTODE CONVERTER

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 9JG

Pin 1 - Cathode,
 Pentode
 Grid No.3,
 Internal
 Shield
 Pin 2 - Triode Grid
 Pin 3 - Triode Plate
 Pin 4 - Heater
 Pin 5 - Heater



Pin 6 - Cathode,
 Pentode
 Grid No.3,
 Internal
 Shield
 Pin 7 - Pentode
 Grid No.1
 Pin 8 - Pentode
 Grid No.2
 Pin 9 - Pentode Plate

CONVERTER SERVICE

Maximum Ratings, Design-Maximum Values:

	Triode Unit as Osc.	Pentode Unit as Mixer	
PLATE VOLTAGE.	300 max.	300 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE	-	300 max.	volts
GRID-No.2 VOLTAGE.	-	<i>See Grid-No.2 Input</i>	
<i>Rating Chart at front of Receiving Tube Section</i>			
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 150 volts.	-	0.5 max.	watt
For grid-No.2 voltages between 150 and 300 volts.	-	<i>See Grid-No.2 Input</i>	
<i>Rating Chart at front of Receiving Tube Section</i>			
PLATE DISSIPATION.	2.5 max.	2.8 max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200 max.	200 max.	volts
Heater positive with respect to cathode	200 [▲] max.	200 [▲] max.	volts



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Maximum Circuit Values:

	<i>Triode Unit</i>	<i>Pentode Unit</i>	
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Grid-No.1-Circuit Resistance:

For fixed-bias operation. . . .	0.5 max.	0.25 max.	megohm
For cathode-bias operation. . .	1 max.	1 max.	megohm

- With external shield JEDEC No.315 connected to cathode except as noted.
- With external shield JEDEC No.315 connected to ground.
- ▲ The dc component must not exceed 100 volts.