



6BR8

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MEDIUM-MU TRIODE— SHARP-CUTOFF PENTODE

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage. 6.3 ac or dc volts

Current. 0.45 amp

Direct Interelectrode Capacitances:

	<i>Without External Shield</i>	<i>With External Shield^o</i>	
<i>Triode Unit:</i>			
Grid to plate.	1.8	1.8	$\mu\mu\text{f}$
Grid to cathode and heater.	2.5	2.5	$\mu\mu\text{f}$
Plate to cathode and heater.	0.4	1	$\mu\mu\text{f}$

Pentode Unit:

Grid No.1 to plate	0.015 max.	0.008 max.	$\mu\mu\text{f}$
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater	5	5	$\mu\mu\text{f}$
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater	2.6	3.5	$\mu\mu\text{f}$
Heater to cathode (Each unit).	3	3 [•]	$\mu\mu\text{f}$

Characteristics:

	<i>Triode Unit</i>	<i>Pentode Unit</i>	
Plate-Supply Voltage	150	250	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	110	volts
Cathode Resistor	56	68	ohms
Amplification Factor	40	—	
Plate Resistance (Approx.)	5000	400000	ohms
Transconductance	8500	5200	μmhos
Plate Current	18	10	ma
Grid-No.2 Current	—	3.5	ma
Grid-No.1 Voltage (Approx.) for plate current of 10 μa	-12	-10	volts

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"
Maximum Diameter	7/8"
Dimensional Outline.	See General Section
Bulb	T6-1/2

^o, [•]: See next page.

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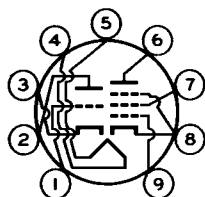


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MEDIUM-MU TRIODE— SHARP-CUTOFF PENTODE

Base. Small-Button Noval 9-Pin (JETEC No.E9-1)
Basing Designation for BOTTOM VIEW. 9FA

Pin 1—Triode Grid
Pin 2—Triode Plate
Pin 3—Triode Cathode
Pin 4—Heater
Pin 5—Heater
Pin 6—Pentode Plate
Pin 7—Pentode
Grid No.2



Pin 8—Pentode
Cathode,
Pentode
Grid No.3,
Internal
Shield
Pin 9—Pentode
Grid No.1

CONVERTER SERVICE

Maximum Ratings, Design-Center 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	—	See Grid-No.2 Input	
<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	—	See Grid-No.2 Input	
<i>Rating Chart at front of Receiving Tube Section</i>			
PLATE DISSIPATION	2.7 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

○ With external shield JETEC No.315 connected to cathode of unit under test except as noted.

● With external shield JETEC No.315 connected to ground.

▲ The dc component must not exceed 100 volts.

Curves shown under Type 6U8-A also apply to the 6BR8