

Medium-Mu Twin Triode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater Characteristics and Ratings (*Design-Center Values*):

Voltage (AC or DC)	6.3 ± 0.6	volts
Current at heater volts = 6.3	0.300	amp
Peak heater-cathode voltage (Each unit):		
Heater negative with respect to cathode.	60 max.	volts
Heater positive with respect to cathode.	120 max.	volts

Direct Interelectrode Capacitances:^a

	Unit No.1	Unit No.2	
Grid to plate	1.4	1.4	μμf
Grid to cathode, internal shield, and heater.	3.1	3.1	μμf
Plate to cathode, internal shield, and heater.	1.75	1.65	μμf
Heater to cathode	2.6	2.7	μμf

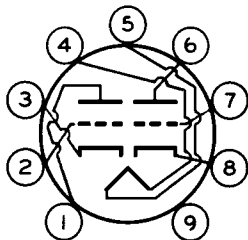
Characteristics, Class A₁ Amplifier (Each Unit):^b

Plate Supply Voltage.	100	90	volts
Grid Supply Voltage	9	0	volts
Cathode Resistor.	680	120	ohms
Amplification Factor.	33	—	
Transconductance.	12500	11500	μmhos
Plate Current	15	12	ma

Mechanical:

Operating Position.	Any
Type of Cathodes.	Coated Unipotential
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"
Diameter.	0.750" to 0.875"
Dimensional Outline	See <i>General Section</i>
Bulb.	T6-1/2
Base.	Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW.	9AJ

Pin 1 - Plate of Unit No.2
 Pin 2 - Grid of Unit No.2
 Pin 3 - Cathode of Unit No.2
 Pin 4 - Heater
 Pin 5 - Heater



Pin 6 - Plate of Unit No.1
 Pin 7 - Grid of Unit No.1
 Pin 8 - Cathode of Unit No.1
 Pin 9 - Internal Shield



AMPLIFIER — Class A₁*Values are for Each Unit***Maximum Ratings, Design-Center Values:****PLATE VOLTAGE:**

With plate dissipation = 0.8 watt or greater.	220 max.	volts
With plate dissipation less than 0.8 watt.	250 max.	volts
With plate ma. = 0.	400 max.	volts
With cathode ma. = 0.	550 max.	volts

GRID VOLTAGE:

Negative-bias value	100 max.	volts
Peak-negative value ^c	200 max.	volts

CATHODE CURRENT:

Peak ^c	100 max.	ma
Average	20 max.	ma

GRID INPUT.	0.03 max.	watt
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PLATE DISSIPATION:

Either plate.	1.5 max.	watts
Both plates (Both units operating).	2 max.	watts

BULB TEMPERATURE (At hottest

point on bulb surface).	170 max.	°C
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Maximum Circuit Values:**Grid-Circuit Resistance:**

For fixed-bias operation.	Permitted only when plate ma. < 5
For cathode-bias operation.	1 max. megohm

^a Without external shield.^b Operation under conditions listed in left-hand column is recommended because of the small spread in characteristics.^c Pulse duration (microseconds) = 200 max., duty factor = 0.10 max.**SPECIAL RATINGS & PERFORMANCE DATA****Shock Rating:**

Impact Acceleration	500 max.	g
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This test is performed on a sample lot of tubes from each production run to determine ability of tube to withstand the specified impact acceleration. Tubes are held rigid in four different positions in a Navy Type, High-impact (Flyweight) Shock Machine and are subjected to 5 blows at a hammer angle of 30°.

Fatigue Rating:

Vibrational Acceleration.	2.5 max.	g
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This test is performed on a sample lot of tubes to determine ability of tube to withstand the specified vibrational acceleration. Tubes are rigidly mounted and are subjected for 32 hours to 2.5-g vibrational acceleration at 50 cycles per second in each of three directions.