



12U7

MEDIUM-MU TWIN TRIODE

9-PIN MINIATURE TYPE

For use in automobile radio receivers operating directly from 6-cell storage-battery systems

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage range (DC). 10 to 15.9 volts

This voltage range is on an absolute basis. For longest life, it is recommended that the heater be operated within the voltage range of 11 to 14 volts

Current (Approx.) at 12.6 volts 0.15 amp

Direct Interelectrode Capacitances

(Approx.):

	Without External Shield	With External Shield ^o	
Grid to plate (Each unit) . . .	1.5	1.5	μmf
Grid to cathode and heater (Each unit)	1.6	1.8	μmf
Plate to cathode and heater:			
Unit No.1	0.4	2	μmf
Unit No.2	0.32	2	μmf

Characteristics, Class A₁ Amplifier (Each Unit):

Heater Voltage.	12.6	volts
Plate Voltage	12.6	volts
Grid Voltage.	0	volts
Amplification Factor.	20	
Plate Resistance (Approx.).	12500	ohms
Transconductance.	1600	μmhos
Plate Current	1	ma
Grid Voltage (Approx.) for plate $\mu\text{a} = 10$	-1.5	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"
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)

^o With external shield JEDEC No.315 connected to cathode of unit under test.

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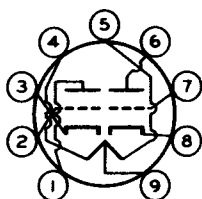


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Basing Designation for BOTTOM VIEW.9A

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 - Heater
Mid-Tap

AMPLIFIER — Class A₁

Values are for Each Unit

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE.	30 max.	volts
CATHODE CURRENT.	15 max.	ma
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode.	30 max.	volts
Heater positive with respect to cathode.	30 max.	volts

Maximum Circuit Values:

Grid-Circuit Resistance:		
For fixed-bias operation	0.25 max.	megohm
For cathode-bias operation	1 max.	megohm