

Diode— Medium-Mu Triode— Remote-Cutoff Pentode

9-PIN MINIATURE TYPE

For Automobile Radio Receivers Operating
Directly from 6-Cell Storage Batteries

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage range (DC). 10 to 15.9 volts

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 0.32 amp

Direct Interelectrode Capacitances:^a

Triode Unit:

Grid to plate 1.7 μf

Grid to cathode and heater. 2.6 μf

Plate to cathode and heater 2 μf

Pentode Unit:

Grid No.1 to plate. 0.015 max. μf

Grid No.1 to cathode & grid No.3 &
internal shield, grid No.2,
and heater. 8.5 μf

Plate to cathode & grid No.3 &
internal shield, grid No.2,
and heater. 5.5 μf

Pentode grid No.1 to triode grid. 0.012 max. μf

Pentode grid No.1 to diode plate. 0.004 max. μf

Triode grid to diode plate. 0.17 max. μf

Triode plate to diode plate 0.8 μf

Characteristics, Class A₁ Amplifier:

With heater voltage of 12.6 volts

	Triode Unit	Pentode Unit	
Plate Voltage	12.6	12.6	volts
Grid-No.2 Voltage	—	12.6	volts
Grid-No.1 Voltage developed across a 2.2-megohm grid-No.1 resistor	-0.6	-0.8	volt
Amplification Factor.	10	—	
Plate Resistance (Approx.).	—	0.4	megohm
Transconductance.	1200	2700	μmhos
Plate Current	1	1.9	ma
Grid-No.2 Current	—	0.7	ma
Grid-No.1 Voltage (Approx.) for transconductance (μmhos) = 30	—	-2.8	volts
Grid Voltage (Approx.) for plate μa = 10	-3.5	—	volts

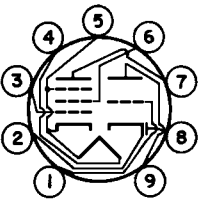


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Mechanical:

Operating Position. Any
Maximum Overall Length. 2-7/16"
Maximum Seated Length. 2-3/16"
Length, Base Seat to Bulb Top (Excluding tip) 1-13/16" ± 3/32"
Diameter. 0.750" to 0.875"
Bulb. T6-1/2
Base. Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW. 9KU

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



Pin 6-Pentode Grid No.2
Pin 7-Pentode Plate
Pin 8-Diode Plate
Pin 9-Triode Plate

AMPLIFIER — Class A₁

Maximum Ratings, Design-Center Values:

	Triode Unit	Pentode Unit	
PLATE VOLTAGE	16 max.	16 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE.	-	16 max.	volts
GRID-No.2 VOLTAGE	-	16 max.	volts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode.	16 max.	-	volts
Heater positive with respect to cathode.	16 max.	-	volts

Maximum Circuit Values:

	Triode Unit	Pentode Unit	
Grid-No.1-Circuit Resistance. . .	10 max.	10 max.	megohms

DIODE UNIT

Maximum Ratings, Design-Center Values:

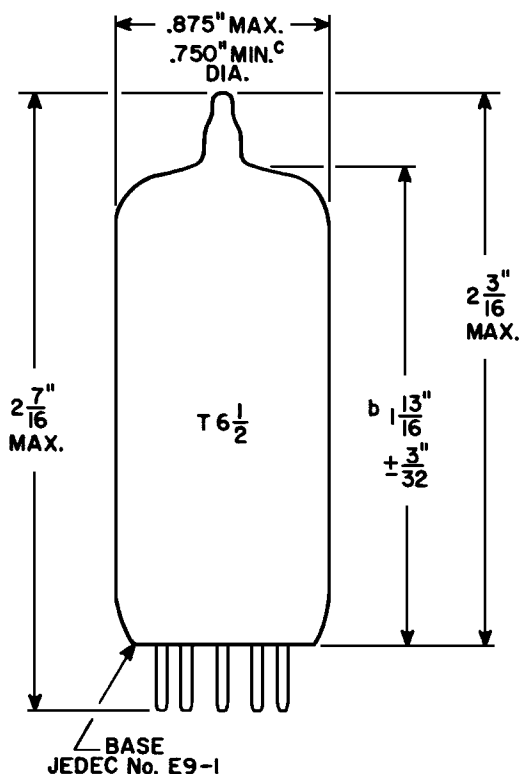
PLATE CURRENT	5 max.	ma
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Characteristics, Instantaneous Test Condition:

Plate Current for plate volts = 10.	2	ma
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^a without external shield.





- ^b MEASURED FROM BASE SEAT TO BULB-TOP LINE AS DETERMINED BY RING GAUGE OF $\frac{7}{16}''$ INSIDE DIAMETER.
- ^c APPLIES IN ZONE STARTING $0.375''$ FROM SEAT.

