Medium-Mu Triode—Remote-Cutoff Tetrode

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	0.35	amp
Direct Interelectrode Capacitances (Approx.):[a]		
Triode Unit:		
Grid to plate	1.5	μμf
Grid to cathode & internal shield, and heater	2	μμf
Plate to cathode & internal shield, and heater	2	μμf
Tetrode Unit:		
Grid No.1 to plate	0.74	μμf
Grid No.1 to cathode, grid No.2, and heater	11	μμf
Plate to cathode, grid No.2, and heater	3	μμf

Characteristics, Class A_1 Amplifier:

With heater voltage of 12.6 volts

	Triode Unit	*Tetrode Unit*	
Plate Voltage	12.6	12.6	volts
Grid-No.2 Voltage	–	12.6	volts
Grid-No.1 Voltage	0	–	volts
Grid-No.1 Resistor	–	2.2	megohms
Amplification Factor	20	–	
Plate Resistance (Approx.)	10000	5000	ohms
Transconductance	2000	6000	μmhos
Plate Current	1.2	14	ma
Grid-No.2 Current	–	2	ma
Grid Voltage (Approx.) for plate μa = 10	−2	–	volts
Grid-No.1 Voltage (Approx.) for plate μa = 20	–	−9	volts

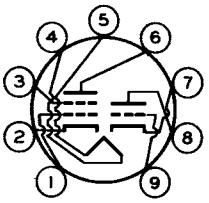
Mechanical:

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" ± 3/32"

12DY8

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. 9JD

Pin 1 - Tetrode Grid No.1
Pin 2 - Tetrode Cathode
Pin 3 - Tetrode Grid No.2
Pin 4 - Heater
Pin 5 - Heater



Pin 6 - Tetrode Plate
Pin 7 - Triode Cathode, Internal Shield
Pin 8 - Triode Plate
Pin 9 - Triode Grid No.1

TETRODE UNIT — RELAY-CONTROL SERVICE

Maximum Ratings, *Design-Maximum Values:*

PLATE VOLTAGE	16 max.	volts
GRID-No.2 (SCREEN-GRID) 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

Typical Operation:

Heater Voltage	10	15	volts
Plate Supply Voltage	10	15	volts
Grid-No.2 Voltage	10	15	volts
Grid-No.1 Voltage	-	-6	volts
Grid-No.1 Resistor	10	-	megohms
Plate Load Resistor	700	700	ohms
Plate Current	5 min.	3 max.	ma

Maximum Circuit Values:

Grid-No.1-Circuit Resistance	10 max.	megohms

TRIODE UNIT — AMPLIFIER — Class A_1

Maximum Ratings, *Design-Maximum Values:*

PLATE 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:

Grid-Circuit Resistance	10 max.	megohms

[a] Without external shield.