

Medium-Mu Triode— Sharp-Cutoff Pentode

ELECTRICAL

Heater Characteristics and Ratings

Voltage (AC or DC)	6.3 ± 0.6	V
Current at 6.3 V	0.410	A
Heater-cathode voltage ^a	110 max	V

Direct Interelectrode Capacitances (Approx.)

Triode Unit

P _T to G _T	1.8	pF
G _T to K, H	3.3	pF
P _T to all except G _{1p}	1.7	pF

Pentode Unit (With external shield)

Input	6.2	pF
Output	3.5	pF
P _p to G _{1p}	0.009	pF
G _{1p} to G _{2p}	1.5	pF

Between Triode and Pentode Units

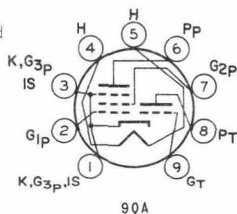
P _T to P _p	0.025 max	pF
P _p to G _T	0.01 max	pF
P _T to G _{1p}	0.01 max	pF
G _T to G _{1p}	0.01 max	pF

MECHANICAL

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	2 in
Maximum Seated Length	1-3/4 in
Diameter	0.750 to 0.875 in
Envelope	JEDEC T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC No.E9-1)

TERMINAL DIAGRAM (Bottom View)

- Pin 1—Cathode, Pentode
Grid No.3, Internal Shield
- Pin 2—Pentode Grid No.1
- Pin 3—Same as Pin 1
- Pin 4—Heater
- Pin 5—Heater
- Pin 6—Pentode Plate
- Pin 7—Pentode Grid No.2
- Pin 8—Triode Plate
- Pin 9—Triode Grid



9QA

CHARACTERISTICS

	Triode Unit	Pentode Unit	
Plate Voltage	100	170	V
Grid-No.2 Voltage	-	120	V
Grid-No.1 Voltage	-3	-1.2	V
Amplification Factor	20	55 ^b	



	Triode	Pentode	
	Unit	Unit	
Plate Resistance (Approx.)	-	0.35	M Ω
Transconductance	9000	11000	μ hos
Plate Current.	15	10	mA
Grid No.2 Current.	-	3	mA

DESIGN-MAXIMUM RATINGS

	Triode	Pentode	
	Unit	Unit	
Plate-Supply Voltage	600	600	V
DC Plate Voltage	140	275	V
Grid-No.2 Supply Voltage	-	600	V
DC Grid-No.2 (Screen-Grid) Voltage . .	-	275	V
DC Grid-No.1 (Control-Grid) Voltage. .	-	-50	V
Cathode Current.	22	20	mA
Plate Dissipation.	1.8	2.4	W
Grid-No.2 Input ^c	-	0.55	W

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance

For fixed-bias operation	0.5	1	M Ω
For cathode-bias operation	0.5	2.2	M Ω

^a The hum should be minimized in intercarrier receiver applications by limiting the heater-cathode voltage to 100 volts rms, and in AM receivers to 50 volts rms.

^b Grid No.2 to grid No.1; approximate value.

^c When control grid bias is between -1.5 and -2 volts, screen dissipation is limited to 0.50 watt. When this bias is greater than -2 volts, maximum screen dissipation is 0.36 watt.