

Heater Positive with Respect to Cathode

DC	100 Volts
Total DC and Peak	200 Volts

DIRECT INTERELECTRODE CAPACITANCES

Pentode Section

	Shielded ⁽¹⁾	Unshielded
Grid No. 1 to Plate	—	0.016 Pf
Input: Pg1 to (h + Pk + Pg2 + Pg3 + IS)	5.5	5.5 Pf
Output: Pp to (h + Pk + Pg2 + Pg3 + IS)	3.4	2.4 Pf
Heater to Cathode	2.8 ⁽²⁾	2.8 Pf

Triode Section

Grid to Plate	0.9	0.9 Pf
Input: Tg to (Tk + h + Pk + Pg3 + IS)	1.9	1.7 Pf
Output: Tp to (Tk + h + Pk + Pg3 + IS)	2.6	1.7 Pf
Heater to Cathode	2.8 ⁽²⁾	2.8 Pf

RATINGS (Design Maximum Rating System)

	Pentode Section	Triode Section
Plate Voltage	330	330 Volts
Screen Supply Voltage	330	— Volts
Screen Voltage	See Rating Chart (Gen. Info. Sec.)	
Positive DC Grid No. 1 Voltage	0	0 Volt
Plate Dissipation	3.0	0.55 Watts
Screen Dissipation	0.55	— Watt
Grid No. 1 Circuit Resistance		
Fixed Bias	0.25	0.5 Megohm
Cathode Bias	1.0	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Pentode Section	Triode Section
Plate Voltage	125	100 Volts
Screen Voltage	125	— Volts
Grid No. 1 Voltage	-1.0	-1.0 Volt
Amplification Factor	—	70
Plate Resistance (Approx.)	200,000	54,000 Ohms
Transconductance	6500	1300 μ mhos
Plate Current	12	0.8 Ma
Screen Current	4.0	— Ma
Grid No. 1 Voltage (Approx.) Ib = 50 μ a	—	-1.5 Volts
Grid No. 1 Voltage (Approx.) Ib = 20 μ a	-9	— Volts

NOTES:

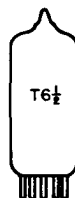
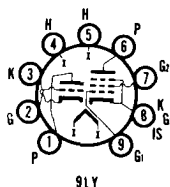
- (1) With external shield (EIA 315) connected to cathode of section under test unless otherwise indicated.
- (2) With external shield (EIA 315) connected to ground.

OSCILLATOR and MIXER

19KG8

Medium Mu Triode and Sharp Cutoff Pentode

Construction	Miniature T-6½
Base	Butt-on 9 Pin, E9-1
Basing	9LY
Outline	6-2
Maximum Diameter	0.875 In.
Maximum Seated Height	1.937 In.
Maximum Overall Height	2.187 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage	18.9 Volts
Heater Current	150 Ma
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
Total DC and Peak	200 Volts
Heater Positive with Respect to Cathode	
DC	100 Volts
Total DC and Peak	200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Shielded)⁽¹⁾

Pentode Section

Grid No. 1 to Plate (Max.).....	0.01 Pf
Input: Pg1 to (h + Pk + Pg2 + Pg3 + IS)	5.5 Pf
Output: Pp to (h + Pk + Pg2 + Pg3 + IS)	3.4 Pf

Triode Section

Grid to Plate	1.7 Pf
Input: g to (h + Tk + Pk + Pg3 + IS).....	3.2 Pf
Output: p to (h + Tk + Pk + Pg3 + IS).....	2.2 Pf

RATINGS (Design Maximum Rating System)

	Pentode Section	Triode Section
Plate Voltage (Max.)	300	300 Volts
Screen Supply Voltage (Max.)	300	— Volts
Screen Voltage	See Rating Chart (Gen. Info. Sec.)	
Positive DC Grid No. 1 Voltage (Max.)	0	0 Volt
Plate Dissipation (Max.)	2.5	2.5 Watts
Screen Dissipation (Max.)	0.55	— Watt
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	2.2	2.2 Megohms
Cathode Bias (Max.)	2.2	2.2 Megohms

CHARACTERISTICS AND TYPICAL OPERATION

	Pentode Section	Triode Section
Plate Voltage	125	125 Volts
Screen Voltage.....	125	— Volts
Grid No. 1 Voltage	-1.0	-1.0 Volt
Amplification Factor	—	46
Plate Resistance (Approx.)	200,000	5400 Ohms
Transconductance	7500	8500 μ mhos
Plate Current	12	13.5 Ma
Screen Current	4.0	— Ma
Grid No. 1 Voltage (Approx.)		
Ib = 10 μ a.....	-8	-8 Volts

NOTE:

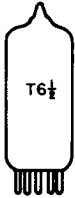
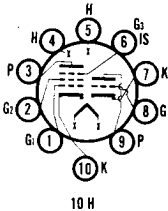
(1) With external shield (EIA 315) connected to cathode of section under test.

190Q

RF AMPLIFIER and
AUTODYNE MIXER

Medium Mu Triode and
Semi-Remote Cutoff Pentode

Construction	Miniature T-6½
Base	Button 10 Pin, E9-1
	With Center Pin Added
Basing	10H
Outline	6-13
Maximum Diameter	0.875 In.
Maximum Seated Height	1.940 In.
Maximum Overall Height	2.190 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage.....	18.9 Volts
Heater Current	150 Ma
Heater Warm-up Time	17 Seconds
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
Total DC and Peak.....	200 Volts
Heater Positive with Respect to Cathode	
DC	100 Volts
Total DC and Peak.....	200 Volts

DIRECT INTERELECTRODE CAPACITANCES

	Shielded ⁽¹⁾	Unshielded
Triode Section		
Grid to Plate	1.7	1.7 Pf
Input: g to (h + k + Pk + IS).....	3.2	3.2 Pf
Output: p to (h + k + Pk + IS).....	1.9	1.1 Pf
Heater to Cathode	3.0	3.0 Pf