

Heater Positive with Respect to Cathode	
DC	100 Volts
Total DC and Peak.....	200 Volts

DIRECT INTERELECTRODE CAPACITANCES

Grid No. 1 to Plate (Max.).....	0.08 Pf
Grid No. 3 to Plate (Max.).....	0.35 Pf
Grid No. 1 to Grid No. 3 (Max.).....	0.22 Pf
Grid No. 1 to All Other Electrodes.....	5.4 Pf
Grid No. 3 to All Other Electrodes.....	6.9 Pf
Plate to All Other Electrodes.....	7.6 Pf

RATINGS (Design Maximum Rating System)

Plate Voltage (Max.)	330 Volts
Grid No. 2 and Grid No. 4 Voltage	See Rating Chart (Gen. Info. Sec.)
Grid No. 2 and Grid No. 4 Supply Voltage (Max.).....	330 Volts
Grid No. 3 Voltage	
Negative Bias Value (Max.)	-55 Volts
Positive Bias Value (Max.)	0 Volt
Positive Peak Value (Max.)	27 Volts
Grid No. 1 Voltage (Negative Bias Value) (Max.)	-100 Volts
Plate Dissipation (Max.)	2.3 Watts
Grid No. 3 Input (Max.)	0.1 Watt
Grid No. 1 and Grid No. 4 Input	
Up to 165 Volts (Max.).....	1.1 Watts
165 to 330 Volts	See Rating Chart (Gen. Info. Sec.)
Grid No. 1 Input (Max.)	0.1 Watt
Grid No. 1 or Grid No. 3 Circuit Resistance	
Fixed Bias	0.5 Megohm
Cathode Bias	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Sync Separator and Clipper

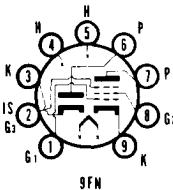
Plate Voltage	10 Volts
Grid No. 3 Voltage	0 Volt
Grid No. 2 and Grid No. 4 Voltage	25 Volts
Grid No. 1 Voltage	0 Volt
Plate Current	1.4 Ma
Grid No. 2 and Grid No. 4 Current.....	3.5 Ma
Eg3 for Eb = Eg2 = Eg4 = 25 V, Eg1 = 0 V and Ib = 50 μ a.....	-2.5 Volts
Eg1 for Eb = Eg2 = Eg4 = 25 V, Eg3 = 0 V and Ib = 50 μ a.....	-2.3 Volts

LIMITER or DETECTOR (D)
RF or IF AMPLIFIER (P)

6BY8

High Perveance Diode
and Sharp Cutoff Pentode

Construction	Miniature T-6½
Base	Button 9 Pin, E9-1
Basing	.9FN
Outline	.6-3
Maximum Diameter	0.875 In.
Maximum Seated Height	2.375 In.
Maximum Overall Height	2.625 In.



ELECTRICAL DATA
HEATER OPERATION

Heater Voltage.....	6.3 Volts
Heater Current	600 Ma
Heater Warm-up Time	11 Seconds
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
Total DC and Peak.....	200 Volts