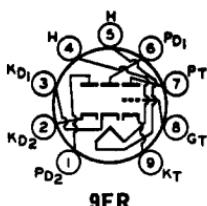


TWIN DIODE— HIGH-MU TWIN TRIODE

6BN8
8BN8

**9ER**

Miniature type used in color and black-and-white television receiver applications. The triode unit is used in burst-amplifier, af amplifier, and low-frequency oscillator applications. The diode units are used in phase-detector, ratio-detector or discriminator, and horizontal afc discriminator circuits. Outlines section, 6E; requires miniature 9-contact socket. Type 8BN8 is identical with type 6BN8 except for heater ratings.

	6BN8	8BN8	
Heater Voltage (ac/dc)	6.3	8.4	volts
Heater Current	0.6	0.45	ampere
Heater Warm-up Time (Average)	11	11	seconds
Heater-Cathode Voltage:			
Peak value	±200 max	±200 max	volts
Average value	100 max	100 max	volts
Direct Interelectrode Capacitances:			
Triode Grid to Triode Plate	2.5	pF	
Triode Grid to Cathode and Heater	3.6	pF	
Triode Plate to Cathode and Heater	0.25	pF	
Plate of Diode Unit No.1 to Triode Grid	0.06 max	pF	
Plate of Diode Unit No.2 to Triode Grid	0.1 max	pF	
Plate of Diode Unit No.1 to Plate of Diode Unit No.2	0.07 max	pF	
Diode Cathode to All Other Electrodes (Each Diode Unit)	5	pF	
Diode Plate to Diode Cathode and Heater (Each Diode Unit)	1.9	pF	
Diode Cathode to Diode Plate and Heater (Each Diode Unit)	4.8	pF	
Diode Plate to All Other Electrodes (Each Diode Unit)	3	pF	

Triode Unit as Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	330	volts
Grid Voltage, Positive-bias value	0	volts
Plate Dissipation	1.7	watts

CHARACTERISTICS

Plate Voltage	100	250	volts
Grid Voltage	-1	-3	volts
Amplification Factor	75	70	
Plate Resistance (Approx.)	21000	28000	ohms
Transconductance	3500	2500	μmhos
Plate Current	1.5	1.6	mA
Grid Voltage (Approx.) for plate current of 10 μA	-2.5	-5.5	volts

MAXIMUM CIRCUIT VALUE

Grid-Circuit Resistance	1	megohm
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Diode Units

MAXIMUM RATINGS (Design-Maximum Values)

Plate Current (Each Unit):		
Peak	54	mA
Average	9	mA

