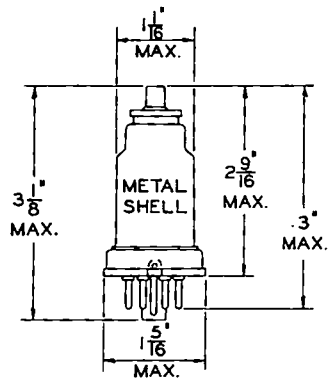
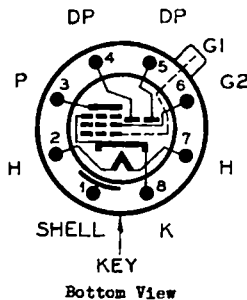




GENERAL DESCRIPTION

Application: The Ken-Rad 6B8 is a cathode type duplex tube consisting of a pentode and two diodes in a single envelope. The pentode section may be operated in radio, intermediate, or audio frequency amplifiers and the diodes used for detection and automatic volume control. The variety of functions which are possible make the tube particularly suited to radio receivers where the number of tubes is a consideration. The suppressor grid of the pentode is internally connected to the cathode. The base is of the small octal type and the tube elements are enclosed in a metal shell which is connected to one of the base pins.

Physical Characteristics:



RATING AND CHARACTERISTICS

Heater:		
Voltage	6.3	Volts AC or DC
Current	0.3	Ampere

Note: Voltage between heater and cathode should be kept at a minimum if direct connection is not possible.

AMPLIFIER OPERATION (R.F. or I.F.) PENTODE SECTION

Plate Voltage	250 Max.	Volts
Screen Voltage	125 Max.	Volts
Grid Voltage	-3	Volts
Plate Current	10.0	Milliamperes
Screen Current	2.3	Milliamperes
Plate Resistance	0.6 Approx.	Megohm
Amplification Factor	800 Approx.	
Mutual Conductance	1325	Micromhos
*Grid Voltage	-21 Approx.	Volts

*Voltage for cathode current cut-off.

DIODE OPERATION

The two diode plates are mounted about the common cathode sleeve but are otherwise isolated from each other and the pentode unit. These diodes may be operated singly as half-wave rectifiers, tied together as a single half-wave rectifier or operated in a full-wave arrangement. The full-wave circuit will provide about half the voltage obtainable from the half-wave circuit.

Automatic volume control may be effected by applying the D.C. voltage developed in the diode load to the control elements of preceding amplifier tubes. This D.C. voltage may be obtained from the same diode circuit as used for detection or from one of the diode plates operating separately as a bias rectifier.

Direct Interelectrode Capacitances: Pentode Unit

$G_1 - P$	0.005	$\mu\text{f. Max.}$ ✓
$G_1 - (K + G_2 + G_3)$	6.0	$\mu\text{f.}$ ✓
$P - (K + G_2 + G_3)$	9.0	$\mu\text{f.}$ ✓