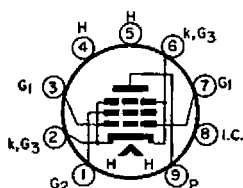


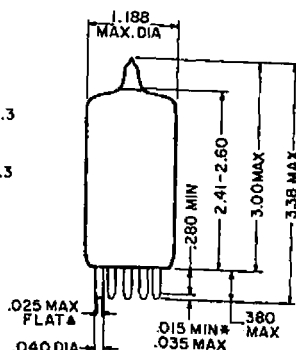
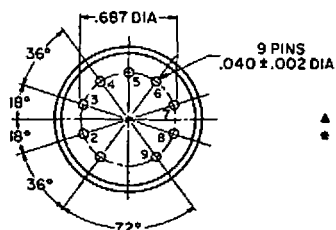
AMPEREX TUBE TYPE 8278

The Amperex 8278 is a novar beam power tetrode designed for 40 watt push-pull audio output with only a 250 volt supply. The very high transconductance of 24,000 micromhos, exceptional uniformity and reliability of this tube are attained through the use of the Amperex ampliframe grid.



PIN CONNECTION

1. GRID NO.2
2. CATHODE, GRID NO.3
3. GRID NO.1
4. HEATER
5. HEATER
6. CATHODE, GRID NO.3
7. GRID NO.1
8. INTERNAL CONNECTION PLATE
9. INTERNAL CONNECTION PLATE



▲ NOT TO BE BROUGHT TO A SHARP POINT.

* THIS DIMENSION MAY VARY WITHIN THE LIMITS SHOWN AROUND THE PERIPHERY OF ANY INDIVIDUAL PIN. THE SURFACE OF THE PIN SHALL BE CONVEX OR CONICAL IN SHAPE AND NOT BROUGHT TO A SHARP POINT.

GENERAL CHARACTERISTICS

MECHANICAL

Bulb
Base
Outline
Dimensions

See Outline drawing
Novar
See Outline drawing
See Outline drawing

ELECTRICAL

Heating

Heater Voltage
Heater Current

Indirect AC-DC parallel
supply
6.3 volts
1.2 amps

MAXIMUM RATINGS (Design Center Values)

D.C. Plate Voltage (Zero Plate Current)
Screen Grid Voltage (Cold Condition)
D.C. Plate Voltage
D.C. Grid No. 2 Voltage
Cathode Current
Plate Dissipation
Grid No. 2 Power Dissipation
Control Grid Circuit Resistance
(Automatic Bias)
Cathode-Heater Voltage

E_{bb} 550 volts
550 volts
 E_b 300 volts
 E_{c2} 300 volts
 I_k 200 ma
 P_b 25 watts
 P_{c2} 4 watts
 R_{c1} 0.5 megohm
 E_{kh} ± 100 volts

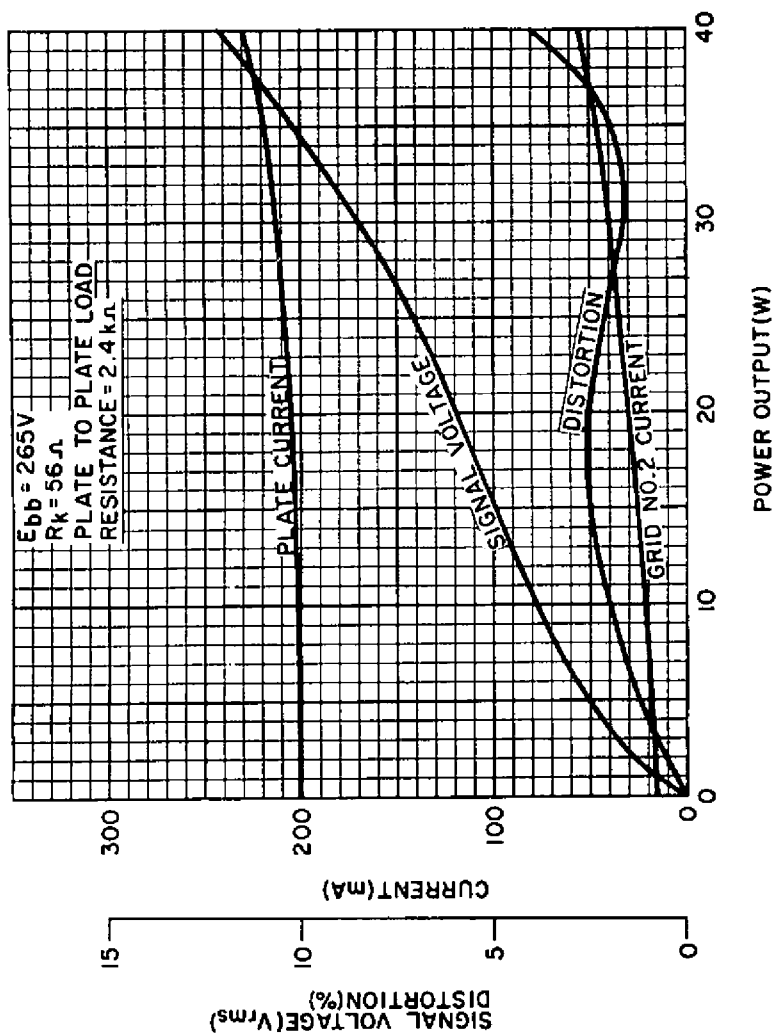
8278

Typical Characteristics

D.C. Plate Current	E_b	250 volts
D.C. Grid No. 2 Voltage	E_{c2}	250 volts
D.C. Grid No. 1 Voltage	E_{c1}	-12.5 volts
Plate Current	I_b	100 ma
D.C. Grid No. 2 Current	I_{c2}	8 ma
Transconductance	G_m	24000 μ mhos
Amplification Factor, Grid No. 2 to Grid No. 1	μ_{c2c1}	14
Internal Plate Resistance	r_p	7300 ohms

Typical Operating Conditions - Push-Pull Class AB

D.C. Plate Supply Voltage	E_{bb}	265	265 volts
D.C. Grid No. 2 Supply Voltage	E_{cc2}	265	265 volts
Series Cathode Resistor (Common)	R_K	56	56 ohms
Plate to Plate Load Resistance	R_{p-p}	2400	2400 ohms
Plate Current	I_b	2x100	2x115 ma
D.C. Grid No. 2 Current	I_{c2}	2x8	2x27 ma
Signal Voltage	E_{sig}	0	12 volts rms
Harmonic Distortion	D_t	-	4 %
Power Output	P_o	0	40 watts



TYPICAL CHARACTERISTICS AS A FUNCTION OF
POWER OUTPUT