DESCRIPTION
The PL-8432 is a forced-air cooled, 1000-watt plate dissipation ceramic-envelope beam pentode featuring compact construction. This tube is especially suited for low-distortion Class-AB, linear r-f amplifier use, where a single tube will deliver over 1500 watts of useful power output. The excellent characteristics of the PL-8432 also provide outstanding performance in Class-AB1, Class-B and Class-C service.

ELECTRICAL CHARACTERISTICS
Cathode — Coated Unipotential
Heater Voltage - 6.0 volts
Heater Current - 8.2 amperes
Minimum Cathode Heating Time - 3 minutes
Grid-Screen mu Factor - 3.4
Transconductance (1000 v. Eb, 500 v. Ec2, 1 a. Ia) - 23,000 &mu;mhos
Interelectrode Capacitances
Grid-Plate - 0.09 &mu;f
Input - 42 &mu;f
Output - 20 &mu;f

MECHANICAL CHARACTERISTICS
Base - 7-pin Septar, EIA E 7-2
Base Connections - See base diagram
Maximum Overall Dimensions
Length - 4.75 inches
Diameter - 3.53 inches
Net Weight - 2.5 pounds
Cooling
Volume of air through cooler (at 1000 watts plate dissipation; 40°C max. incoming air temperature) - 37 c.f.m., minimum
Pressure Drop (at 37 c. f. m.)
Cooler only - 1.01 in. water
Cooler plus PL-209A socket - 0.18 in. water
Recommended Socket - PL-209A
Mounting Position - Any

MAXIMUM RATINGS
CCS (Continuous Commercial Service) Class-C Class-AB1 Class-AB1
D-C Plate Voltage 3000 3000 2000
D-C Screen-Grid Voltage 500 500 600
D-C Suppressor-Grid Voltage 75 75 75
D-C Control-Grid Voltage -200 -800 -800
D-C Plate Current 1000 1000 -mo.
D-C Control-Grid Current 10 10 -mo.
Control-Grid Dissipation 5 5 -watts
Screen-Grid Input 30 30 -watts
Plate Dissipation 1000 1000 -watts
TYPICAL OPERATION — Class AB1 Linear R-F Amplifier

**Single-Sideband, Suppressed Carrier**

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<tr>
<th>Parameter</th>
<th>2000</th>
<th>2500</th>
<th>3000</th>
<th>3500</th>
<th>Volts</th>
<th>Watts</th>
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1. D-C current values shown are for peak conditions, or for single-tone modulation at full signal.
2. Approximate value; adjust to give stated zero-signal plate current.
3. At maximum output. Referenced against one tone of two equal-tone signals. No degenerative feedback.
4. Single-tone or peak envelope power delivered to load from typical amplifier.