The 6447 is an improved, ruggedized, heavy-wall version of the standard type 892R tube. Incorporating the latest developments in tube design and techniques, the 6447 fills the requirements of the industrial field for a tube similar to the 892R but with higher anode dissipation reserve. This allows for extreme mismatch of load to tube impedance and, therefore, protects the tube against maladjustment or misuse of equipment which cause excessive dissipation.

Among the outstanding features of the new AMPEREX tube are the following:
1. Heavy wall, high conductivity copper anode (7/16" thick)
2. Rugged powdered glass stem which takes the place of the stem press construction.
3. Elimination of the projecting feather-edge seal grid arm by the incorporation of a Kovar ring grid connection.
4. Addition of a strong, conical internal grid support instead of the 3 legged riveted construction. This also provides much lower inductance.
5. Elimination of the more fragile copper feather-edge anode seal and replacement with a Kovar seal.
6. New, stronger spiral filament providing more uniform heat distribution over the anode surface.

GENERAL CHARACTERISTICS

FORCED AIR-COOLED TRIODE

ELECTRICAL

Filament

Tungsten

Two unit type for single-phase or two-phase A.C., or D.C. operation

Voltage (per unit)
11 volts

Current (per unit)
60 amps

Starting current must never exceed 120 amps/unit, even momentarily

Amplification Factor
50

Transconductance (Grid to Plate at $I_t = 0.75$ amp)
7000 micromhos

Direct Inter-electrode Capacitances

Grid to Plate
32 uuf

Grid to Filament
17 uuf

Plate to Filament
1.8 uuf

MECHANICAL

Maximum Overall Dimensions

Length
19 1/8 inches

Diameter
11 inches

Mounting Position
Vertical-ande down

Type of Cooling
1 Forced air

1 Rated air flow must be continuous between the time any voltage is applied and for 5 minutes after voltage is removed.

Cooling Characteristics

<table>
<thead>
<tr>
<th>Plate Dissipation</th>
<th>10.0</th>
<th>8.0</th>
<th>6.0</th>
<th>kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Flow to Radiator</td>
<td>700</td>
<td>500</td>
<td>350</td>
<td>cfm</td>
</tr>
<tr>
<td>Back Pressure</td>
<td>0.9</td>
<td>0.6</td>
<td>0.3</td>
<td>inches water</td>
</tr>
</tbody>
</table>

Maximum Temperatures

Glass-to-metal Seals
Radiator

| | 180° C |
| | 230° C |

Net Weight (approx.)
60 lbs.

ACCESSORIES

External Filament Connector
AMPEREX #S-13484

External Grid Connector
AMPEREX #Y-13326
(supplied with tube without charge)

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

Maximum ratings apply up to 5 megacycles. Operation at higher frequencies is permissible provided the input is reduced and attention given to the glass-to-metal seal temperature:

| Frequency | 5 | 12.5 | 20 | wc |
| Percent of Maximum | |
| Rated Plate Voltage and | |
| Plate Input | 100 | 75 | 50 | % |

R.F. POWER AMPLIFIER AND OSCILLATOR - CLASS C - TELEGRAPHY
(Key down conditions per tube without modulation)

Maximum Ratings

| D.C. Plate Voltage | 14.0 KV |
| D.C. Plate Current | 2.0 amps |
| Plate Input | 26.0 KV |
| Plate Dissipation | 10.0 KW |
| D.C. Grid Voltage | - 3.0 KV |
| D.C. Grid Current | 0.40 amp |

Typical Operation

| Filament Voltage | 21.4 | 21.5 | 21.8 volts |
| D.C. Plate Voltage | 8.0 | 10.0 | 12.0 KV |
| D.C. Plate Current | 1.75 | 1.8 | 2.0 amps |
| D.C. Grid Voltage | - 500 | - 600 | - 800 volts |
| Grid Voltage, Peak RF | 1300 | 1420 | 1740 KV |
| D.C. Grid Current | 0.21 | 0.20 | 0.20 amps |
| Driving Power (approx.) | 273 | 284 | 348 watts |
| Power Output | 9.4 | 12.3 | 17.1 KW |
| Tube Output | 530 | 700 | 970 BTU/min. |