

Eimac
EITEL-McCULLOUGH, INC.
 SAN BRUNO, CALIFORNIA

4X150A / 4000
 AND
4X150A / 4010
 AIR-SYSTEM
 SOCKETS

The Eimac 4X150A/4000 and 4X150A/4010 Air-System Sockets are designed to provide adequate air cooling and an efficient high-frequency circuit arrangement for the Eimac 4X150A and 4X150D tetrodes. The insulating materials used in their construction have very low r-f losses to well above 800 Mc., and are mechanically strong, non-porous, non-hygroscopic and substantially unaffected by temperatures up to 180° Centigrade. The contact fingers are of spring alloy and all metal parts are silver plated to reduce r-f losses.

The 4X150A/4000 Air-System Socket is characterized by having all connecting tabs insulated from the socket flange and skirt. This type socket is intended for use in circuits where the cathode of the tube is not at chassis potential.

The 4X150A/4010 Air-System Socket is characterized by having the four cathode connecting tabs (Numbers 2, 4, 6 and 8) riveted permanently to the socket skirt. This type socket is intended for use in circuits where the cathode of the tube is at chassis potential.

MOUNTING—If the tube and socket are to be used in a coaxial-line circuit, the Air-System Socket may be mounted directly on the end of the coaxial input line. The skirt of the socket fits over a cylinder of 1 5/8" outside diameter, and four mounting holes are provided (See Outline Drawings).

For chassis mounting, a 2 1/4" diameter hole should be cut into the deck and the socket secured by the three toe clamps provided.

DO NOT DRILL THROUGH THE SOCKET FLANGE.

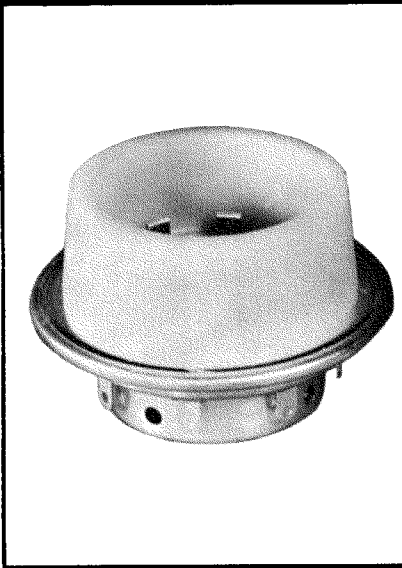
CONNECTIONS—The control grid connection is on the axis of the socket and is provided with a No. 6-32 threaded hole for direct connection to a coaxial line or a terminal lug.

A low impedance path between screen grid and ground is provided by a bypass capacitor of from 2750 $\mu\mu\text{f}$ \pm 500 $\mu\mu\text{f}$ built into the socket flange.

COOLING—A pressurized chamber should be provided to introduce an air stream into the socket from the under side to cool the grid, cathode and screen seals. A heat-resistant chimney is provided to direct the air stream over the tube envelope and through the anode radiator.

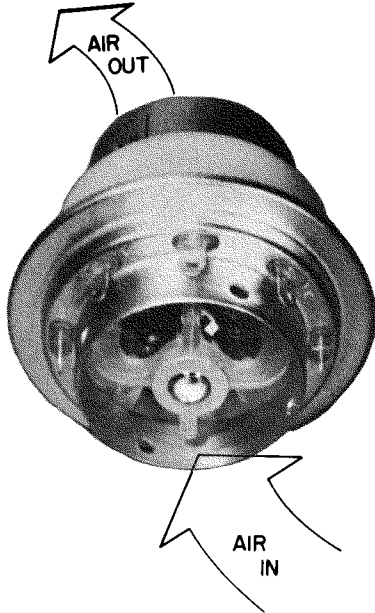
If a coaxial-line circuit is used, the input line should be pressurized, while the output cavity should be made air tight to direct the air through the anode radiator of the tube.

For the specific cooling requirements of the 4X150A and 4X150D, see the paragraph on "Cooling" in the 4X150A Data Sheet.

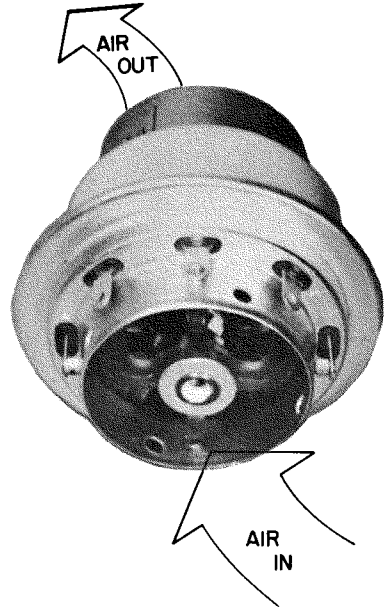


SOCKET IDENTIFICATION

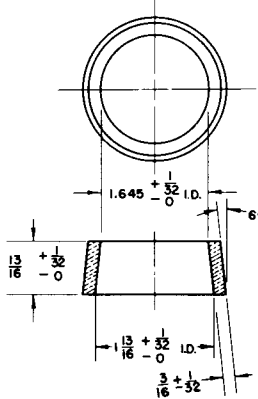
| TYPE NUMBER | DESCRIPTION |
|-------------|--|
| 4X150A/4000 | 4X150A Air-System Socket with Chimney |
| 4X150A/4001 | 4X150A Air-System Socket less Chimney |
| 4X150A/4006 | 4X150A Air-System Chimney Only |
| 4X150A/4010 | 4X150A Air-System Socket—Grounded Cathode—with Chimney |
| 4X150A/4011 | 4X150A Air-System Socket—Grounded Cathode—less Chimney |



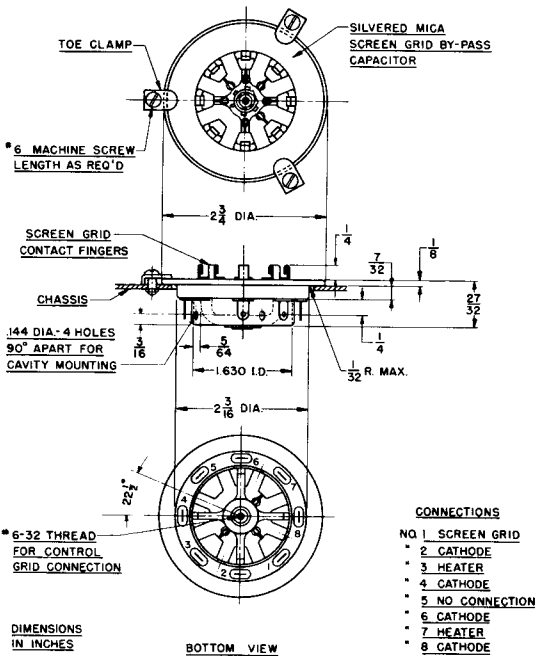
**4X150A/4000
with 4X150A**



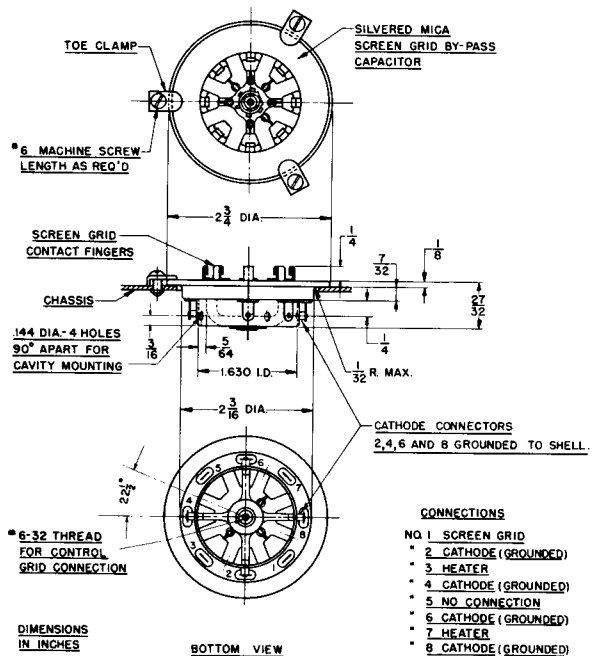
**4X150A/4010
with 4X150A**



4X150A/4006



4X150A/4001



4X150A/4011