

## TECHNICAL DATA

SK-620 SK-620A

AIR-SYSTEM SOCKET

The EIMAC SK-620 is one of the Air-System Sockets recommended for use with those tubes listed at the bottom of this data sheet or other tube types having the same special nine-pin base. A ceramic SK-626 Air Chimney or a fiberglass-reinforced EIMAC resin SK-636 Air Chimney are also available and are recommended for use with the socket when air-cooled tubes are to be employed, except the 8930.

When this socket is used, connection is made to each of the tube electrodes except the anode, and to one side of the integral screen-grid by-pass capacitor. The SK-620 Air-System Socket is humidity and salt-spray resistant. The SK-620A is an improved SK-620 which includes a slightly modified screen by-pass capacitor sealed with an improved encapsulating material to insure reliable performance under high humidity or moisture conditions.

#### **BASE CONNECTIONS**

The SK-620 Air-System Socket consists of eight screen-grid contact fingers, seven pin contacting terminals (no contact is made to pin No. 5), a center control-grid terminal, and an integral screen by-pass capacitor. The cathode of the tube is connected to its external circuits by the four even-numbered base pins which are connected in parallel to minimize the effects of lead inductance; these terminal lugs are insulated from the socket body.

# **SCREEN-GRID BY-PASS CAPACITOR**

Incorporated in the socket structure is a low-inductance screen by-pass capacitor,  $1100 \text{ pF} \pm 20\%$ , which provides a short radio-frequency path to ground. The silvered-mica dielectric, encapsulated in epoxy resin, is humidity and salt-spray resistant. The sockets are hi-voltage tested at 2000 volts dc and are rated for use at 1000 volts dc.

When this socket is mounted on a grounded chassis, one side of the screen-grid by-pass capacitor will automatically be grounded.

## MATERIALS AND FINISHES

The metal shell, or body, of the socket is silver-plated brass. The screen-grid contact fingers and base pin terminals are fabricated of beryllium-copper, heat-treated after forming, then silver-plated. The center control-grid terminal is silver-plated brass as are the toe clamps which are supplied for mounting purposes.

The socket insulating material, polytrifluorochloroethylene, is chemically inert, non-flammable, will not absorb water or water vapors, and is not affected by acids or alkalies. It will not react to normal solvents, except in the case of halogenated compounds which will induce minor dimensional changes. Its physical characteristics are stable over a temperature range of -196°C to +199°C and it is resistant to embrittlement and thermal shock.

### INSTALLATION

The SK-620 and SK-620A Air-System Sockets can be mounted on chassis decks or partitions or in coaxial tuning devices with no modification to the socket. Chassis mounting is accomplished by cutting a 2-¼" diameter hole in the chassis deck or partition. The socket is then placed in the hole and held securely by the three toe clamps provided.

If the socket is to be used in a coaxial line, it may be mounted directly on the end of the input line outer conductor. The socket skirt fits snugly on a 1-%" diameter cylinder and four screw holes are provided for fastening as shown in the outline drawing.

# **TUBE EXTRACTOR**

The SK-604 is a spring-steel device useful for inserting and extracting tubes of the type used in the SK-620 Air-System Socket. It is recommended for use where the construction of the equipment makes it difficult or impossible to grasp the tube by hand or when it is necessary to handle the tubes while they are still hot from recent use.

# THE SK-620 AND SK620A AIR-SYSTEM SOCKETS ARE RECOMMENDED FOR USE WITH THE FOLLOWING TUBES:

 7034/4X150A
 8249/4W300B
 8904/4CX350FJ

 7203/4CX250B
 8321/4CX350A
 8930

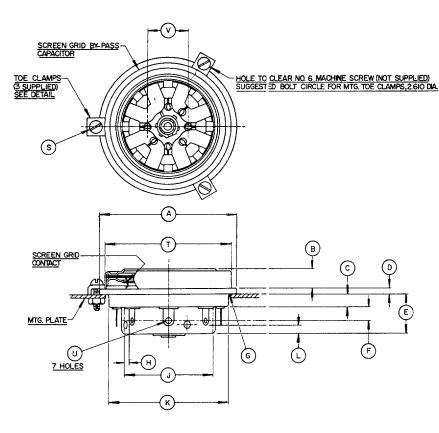
 7580W/4CX250R
 8322/4CX350F
 8957/4CX250BC

 7609
 8621/4CX250FG

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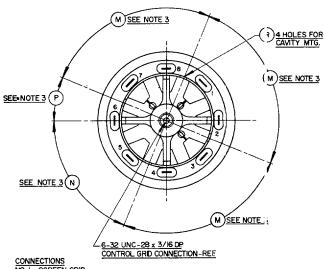


DIM A B	MIN. 2.438	MAX.	555	Г	M	LLIMETE	90
A B	2.438	-			MILLIMETERS		
В			REF.		MIN.	MAX.	REF.
	0740	2.478			61.92	62.94	
^	0.348	0.378			8.84	9.60	
С	0.203	0.235			5.16	5.97	
D	0.105	0.145			2.67	3.68	
E	0.700	0.740			17.78	18.80	
F		•	0.250	l			6.35
G		0.03IR		П		0.79R	
Ι			0.078	П			1.98
7	1.633	1.643			41.48	41.73	
K	2.188	2.208			55.57	56.08	
L	0.172	0.204			4.37	5.18	
М	89°	° 19		П	89°	91°	
Z	66.5°	68.5°			66.5°	68.5°	
Ð	21.5°	23.5°			21.5°	23.5°	
IJ			0.144*				3.66*
S	0.142*	-		l	3.61*		
T	2.285	2.305	-		58.04	58.55	
C		-	0.090*				2.29*
٧			0.687				17.45
AA	1.230R	1,270R			31.24	32.26	
ΑB	0.292	0.332			7.42	8.43	1
ÄC	0.142 *	0.146 *			3.61 *	3.71*	
AD	0.136	0.176			3.45	4.47	
ΑE	0.105	0.145			2.67	3.68	
AF		0.062R				1.57R	
AG	0.261	0.301			6.63	7.64	

\* DIAMETER

NOTES:

I. REF. DIMS. ARE FOR INFO. ONLY
AND ARE NOT REQ'D FOR
INSPECTION PURPOSES.
2. CAPACITANCE, IDOO MMFD ± 20 %
VOLTAGE, 2000 VDC. TEST,
IOO WVDC.
3. TOLERANCES ARE NOT
CUMUL ATIVE.
4. WORD EIMAC IN SOCKET
IDENTIFICATION LABEL IS
LOCATED (APPROX.) NEXT. TO
PIN 5.



CONN	ECTIONS
NO. I	SCREEN GRID
NO. 2	CATHODE
NO.3	HEATER
NO.4	CATHODE
ÑO.5	NO CONNECTION
NQ.6	CATHODE
NO.7	HEATER
NO.8	CATHODE

