

Beam Power Tube

CERMOLOX® RUGGEDIZED TYPE
FORCED-AIR COOLED

INTEGRAL RADIATOR
40 WATTS CW POWER OUTPUT AT 1215 Mc/s

MATRIX-TYPE, OXIDE-COATED, UNIPOTENTIAL CATHODE

For Use in Compact Aircraft, Mobile, and Stationary Equipment
The 8596 is the same as the 7457 except for the following items:

MECHANICAL

Maximum Overall Length	2.036 in
Maximum Diameter	1.327 in

THERMAL

Plate, Grid No.2, Grid No.1, Cathode, and

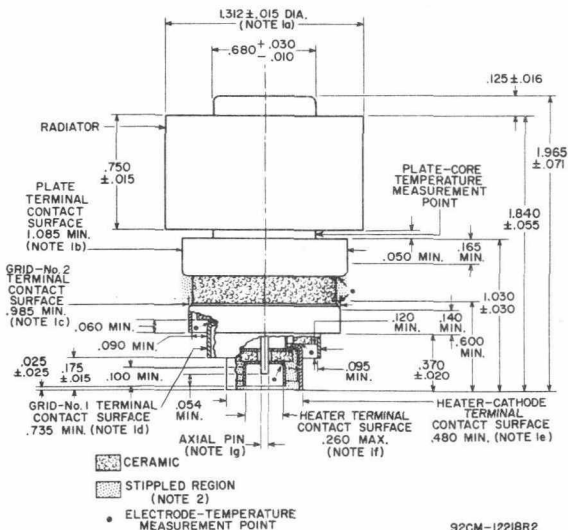
Heater Temperature	250 max	°C
Plate-Core Temperature	250 max	°C

CHARACTERISTICS RANGE VALUES

	Note	Min	Max	
Zero Bias Plate Current	1,7	390	-	mA

NOTE 7: With dc plate volts = 300, dc grid-No.2 volts = 150, dc grid No.1 volts = 0.

DIMENSIONAL OUTLINE



92CM-12218R2

DIMENSIONS IN INCHES

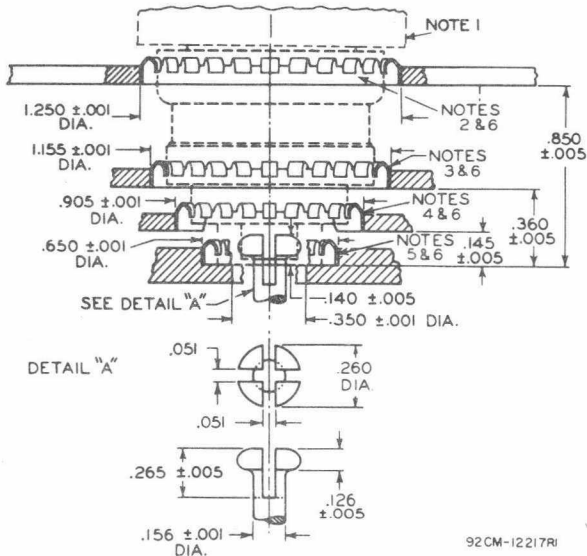
For notes, see next page.

NOTE 1: The following diametrical space requirements accommodate the concentricity of the cylindrical surfaces of the radiator band, axial pin, and each electrode terminal:

- | | |
|------------------------------------|---|
| a. Radiator Band - 1.376 inch | e. Heater-Cathode Terminal - 0.519 inch |
| b. Plate Terminal - 1.119 inch | f. Heater Terminal - 0.238 inch |
| c. Grid-No.2 Terminal - 1.019 inch | g. Axial Pin - 0.071 inch |
| d. Grid-No.1 Terminal - 0.764 inch | |

NOTE 2: Keep all stippled regions clear. Do not allow contacts or circuit components to protrude into these annular volumes.

PREFERRED MOUNTING ARRANGEMENT and Layout of Associated Contacts



DIMENSIONS IN INCHES

NOTE 1: If a clamp is used, it must be adjustable in a plane normal to the major tube axis to compensate for variations in concentricity between the radiator cylinder and the contact terminals.

NOTE 2: Contact ring No. 97-252 or finger stock No. 97-380.

NOTE 3: Contact ring No. 97-253 or finger stock No. 97-380.

NOTE 4: Contact ring No. 97-254 or finger stock No. 97-380.

NOTE 5: Contact ring No. 97-255 or finger stock No. 97-380.

NOTE 6: The specified contact ring of preformed finger stock and finger stock No. 97-380 provide adequate electrical contact, but the finger stock No. 97-380 is less susceptible to breakage than the specified contact ring. Both types are made by Instruments Specialties Co., Little Falls, N. J.