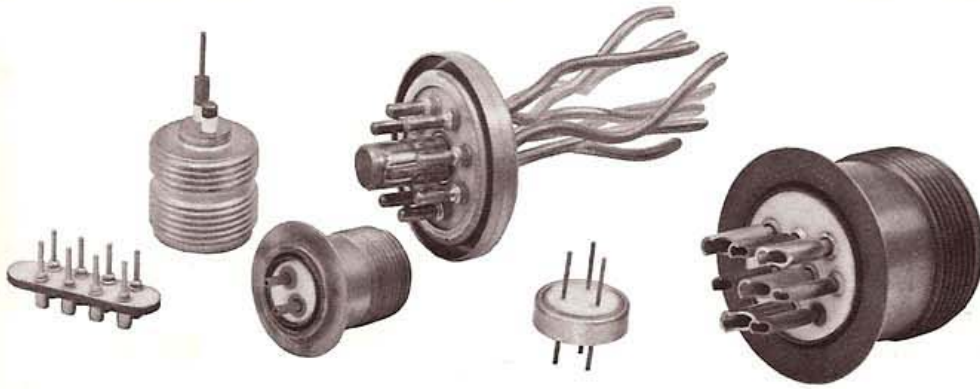




EITEL-McCULLOUGH, INC. SAN CARLOS, CALIFORNIA

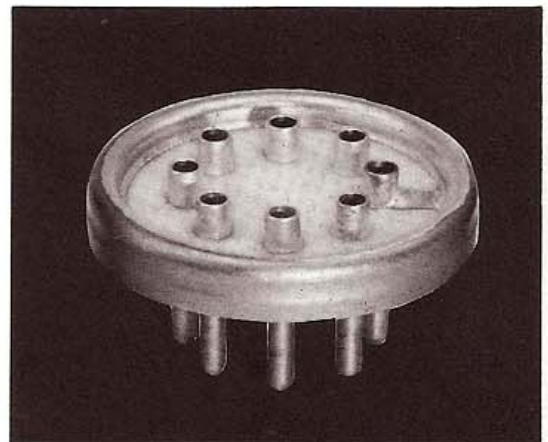
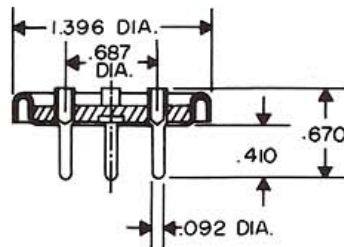
EIMAC HEADER ASSEMBLIES



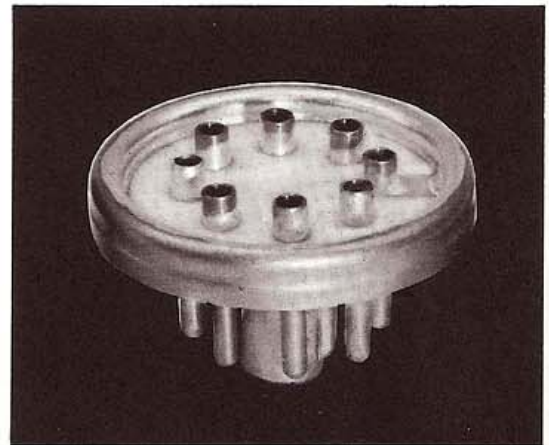
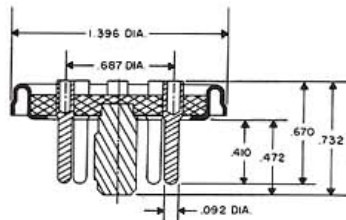
These ceramic-metal assemblies are typical units designed and manufactured by Eimac for use in transmitting type vacuum tubes. They are recommended for use in a wide variety of applications where a vacuum-sealed feed thru is required. They are also a solution to such environmental problems as high temperature, nuclear radiation, wide temperature cycling, and corrosive atmospheres. Ceramic-metal headers offer significant improvements over glass-metal headers, where high strength is required or where a vacuum must be maintained under high temperature or wide temperature cycling.

Insulation used in these headers is alumina (aluminum oxide). Metal parts are kovar, copper, tungsten or nickel, plated as required. The assemblies maintain vacuum integrity of at least 10^{-7} atmosphere/cc/second, under continuous operating temperature of 250°C . and cycling up to 500°C .

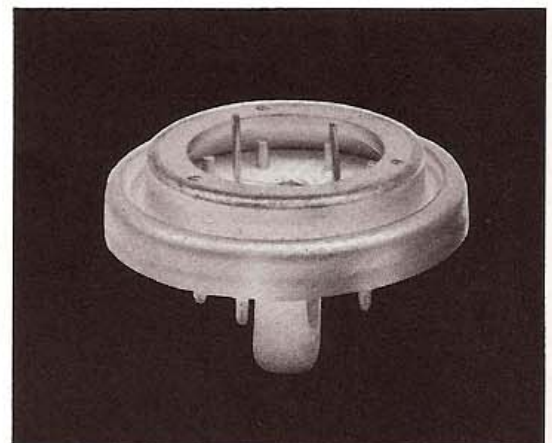
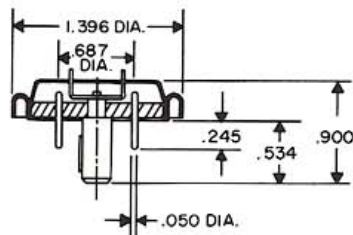
The CA8000 header assembly is a modified tube header. Insulation is 95% alumina. The sealing ring and the feed-thru pins are nickel plated kovar. One pin is grounded to the sealing ring by a metalized tab. Model CA8001 is the same as CA8000 excluding the grounding tab.



Model CA8005 has been used in the Eimac 1K125 reflex klystron. Insulation is 95% alumina. The sealing ring and feed-thru pins are nickel plated kovar. The positioning stem is copper. A metalized tab grounds one pin to the sealing ring. Model CA8006 is the same as CA8005, excluding the grounding tab. CA8005 is also the same as CA8000, with the positioning stem added.

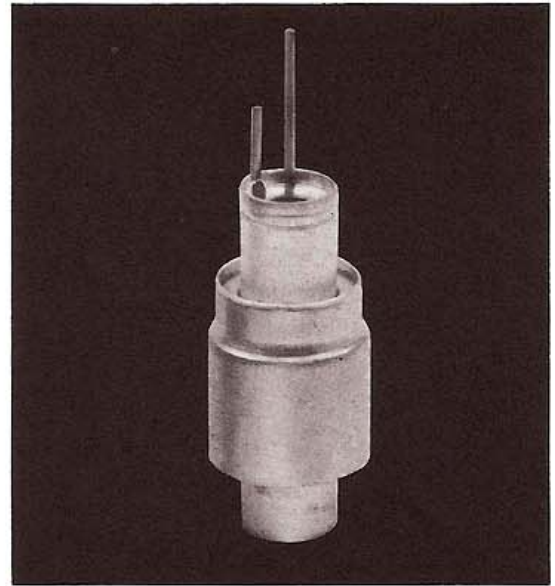
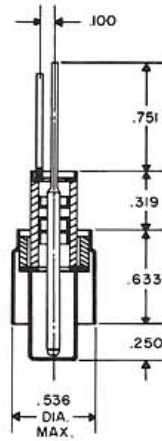


CA8010 is a standard loctal header assembly, used in the 4X150 power grid tube series. Insulation is 95% alumina. The conical flange and the positioning pin are copper. The sealing ring and the feed-thru pins are nickel plated kovar.

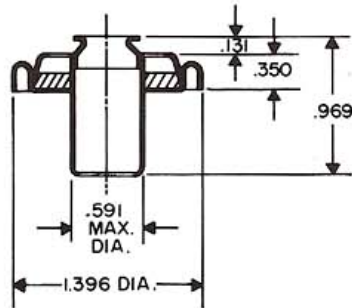


Modifications of these header assemblies can be made to fit a customer's particular requirements. Typical modifications include changes in pin dimensions and materials, deletion of certain pins, and special plating.

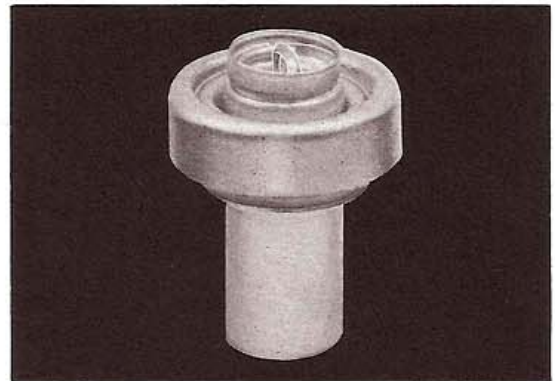
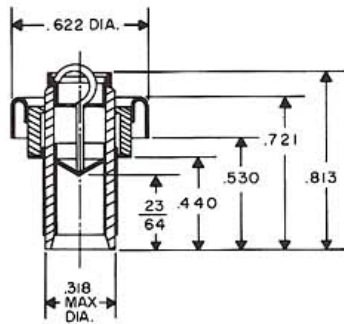
CA9010 stem assembly is used in the 4X150 power grid tube series and mates with CA9020. The ceramic parts are 95% alumina. The center rod is tungsten. The mounting sleeve is nickel plated kovar. The center rod supports are nickel.



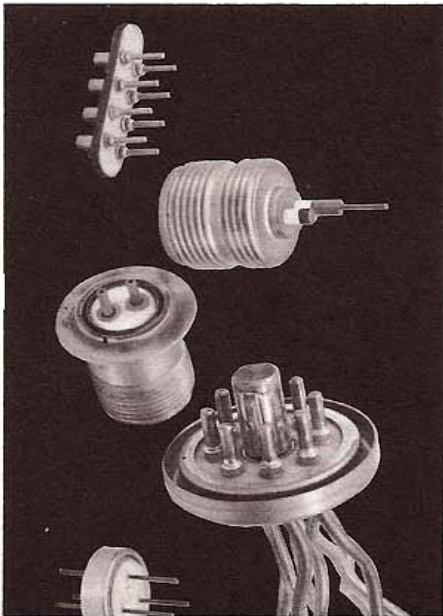
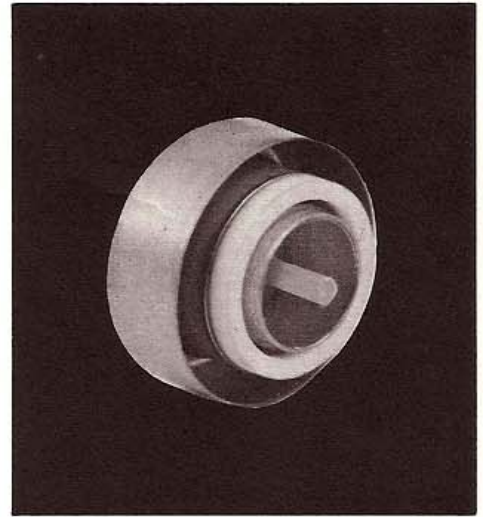
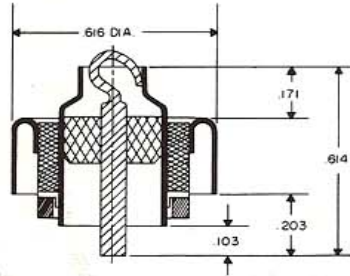
CA9020 stem base assembly is used in the 4X150 power grid tube series and mates with CA9010. The insulator is 95% alumina. The stem and sealing ring are nickel plated kovar.



CA9000 stem assembly is used in the 3CX100 power grid tube series. The insulating sleeves are alumina. The inside and outside diameters of the longer ceramic sleeve are metalized, then silver plated, for low contact resistance. The sealing ring is nickel plated kovar. The center conductor is silver plated nickel.



CA9015 cathode base assembly is used in the Eimac 1K20 reflex klystron family. Insulators are 95% alumina. The center conductor and the feed-thru tube are nickel. The sealing ring is nickel plated kovar and the flange is copper.

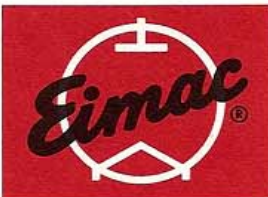


CUSTOM-HEADERS

Custom designed and manufactured ceramic-metal assemblies are available from Eimac. Typical components include transistor bases, rectifier cases, feed thrus, diode capsules, multiple-pin connectors and optical windows. Contact Eimac for design assistance, and for a quotation on any quantity of custom assemblies.



OPTICAL WINDOWS



EITEL-McCULLOUGH, INC.
SAN CARLOS, CALIFORNIA