SMA Hermetic Connector

1. SCOPE

This specification covers the acceptable requirements and the not acceptable conditions for SMA Hermetic Connectors. Unless otherwise specified, figures are shown at approximately 10X magnification and parts shall be viewed at 10X magnification. If no defect is found under specified magnification the connector shall be accepted.

2. INSPECTION CRITERIA

- A. Excluding Figure 1, all conditions shown in this specification are cause for rejection (not acceptable condition).
- B. For visual aids of various connector conditions refer to Figures 1 though 7. of this specification.
 - 1. There shall be no evidence of blistered, cracked, flaking, thin or missing plating on any plated surface. There shall be no plating discoloration and/or foreign material, including plating salts, and/or corrosion greater than 0.001 inch in diameter. Plating integrity is not specifed for blind hole socket contacts below the saw cuts. However, there shall be no significant plating salt residue or corrosion growth that could affect contact reliability. Thread area shall show no evidence of nicks and burrs greater than 0.003 maximum and there shall be no evidence of chatter marks.
 - 2. Not Acceptable, Foreign Material, see Figure 2 and Figure 6.

Any foreign material or plating salts (corrosion) above the level of the slots on the internal bore of the center contact (Reference: Zone A and B of Figure 6), especially insulator material that could prevent proper contact. There shall be no foreign material on the pin or pin interface area. Thread area shall shown no evidence of nicks and burrs greater than 0.003 maximum.

- Not Acceptable, Bent Center Pin and Chatter Marks, see Figure 3.
 If the center pin is bend so as to interfere with proper engagement of the mating connector part is not acceptable. There shall be no evidence of chatter marks on the tread area.
- 4. Not Acceptable, Plating Blisters and/or Buffed/Shiny Surface, See Figure 4.
- 5. Not Acceptable, Corrosion and Thin Plating, see Figure 5.

Any corrosion greater than 0.001 inch diameter is not acceptable. Blistered, cracked, flaking, and thin or missing plating is not acceptable.

6. Not Acceptable, Cracked Insulator and Burrs, see Figure 6.

Any cracked insulator due to shrunken or misformed dielectric is not acceptable. Any burrs in Zone A or hanging burrs large enough to cause dimensions to be out of tolerance in Zone B of the center contact is not acceptable.

7. Not Acceptable, Nicks, see Figure 7

Any nicks larger than 0.003 diameter maximum on the knife edge is not acceptable.





ACCEPTABLE

Figure 1



NOT ACCEPTABLE

Foreign Material

Figure 2

NOT ACCEPTABLE

Bent Center Pin and Chatter Marks

Figure 3





Buffed/Shiny Blistering





NOT ACCEPTABLE

Plating Blisters and/or Buffed/Shiny Surface

Figure 4

NOT ACCEPTABLE

Corrosion or Thin Plating

Figure 5

NOT ACCEPTABLE

Cracked Insulator or Burrs

Figure 6







NOT ACCEPTABLE

Nicks or Knife Edge

Figure 7