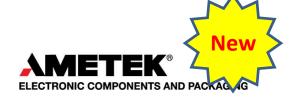


COVER ASSEMBLIES FOR HERMETIC PACKAGES



Coining Cover Assemblies

Coining's Cover Assemblies (CCA) and Ceramic Cover Assemblies (CCCAs) are ideal to hermetically seal electronic packages. The one-piece construction offers distinct manufacturing and cost advantages compared with separate base and solder frame components.

Coining offers Cover Assemblies with metal and ceramic covers/bases. Our fully automated manufacturing capability can easily scale to a wide range of volume needs.

Custom sizes, alloys and plating schemes are also available.

Cover/Base

Metals: Kovar[™], Alloy 42, Copper/Moly, Aluminum alloys, Titanium alloys, Stainless Steel.

Ceramics: Al₂O₃, AlN, BeO

Plating: Nickel plate per QQ-N-290, 50-350 µinches thick. Followed by Gold plate per MIL-G-45204, Type III, Grade A, 50 µinches thick minimum. High-reliability, 4-layer plating is also available.

Size Tolerance: Length & Width: ±0.003"

Flatness: <0.001" for bases <.500" or ≤0.002"

for bases ≥ .500" **Burrs:** <0.001"

Preform/Frame

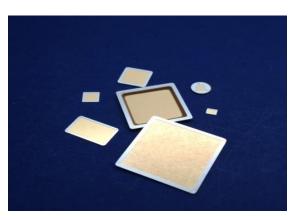
Alloy: Au/Sn, Au/Ge, Sn-based (e.g. SAC 305) **Size Tolerance:** Length & Width: ±0.003"

Thickness: ±0.0003"

Assembly

Tack weld with three integral welds, minimum.

Position tolerance: ± 0.005", Weld Splatter: < 0.003"



Coining Cover Assembly (CCAs)

Fully Automated Manufacturing

Our fully automated manufacturing enables us to rapidly transition from quote to manufacturing components to assembly and packaging of the finished part. Production volumes from 50 pieces to 500,000 pieces are readily accommodated.

Coining can provide the cover/base and preform in an assembly or we can assemble and weld customer supplied cover/base using a Coining preform.

Superior Weld Characteristics

Coining's advanced manufacturing technology produces superior weld characteristics that ensure hermetic sealing.

Our proprietary process eliminates raised material in the weld area and controls weld penetration into the cover/base material.

Alternate Design Possibilities

Contact Coining Engineering to discuss your alternate design challenges. Our engineers will assist you with customized designs for cover/base, preform/frame and related tooling

Direct inquiries may be submitted through our website: www.coininginc.com under Ask An Engineer.