



Case Study

Electronics component manufacturer requires shield ground termination for cable into a bulkhead

THE CHALLENGE

An electronics component manufacturer required a shield ground termination for a cable transitioning into a bulkhead. A connector with backshell solution was not appropriate due to the size and cost implications. As with most cable shield grounding applications, a 360° peripheral ground was necessary for system EMI compliance.

DESIGN REQUIREMENTS

- Provide 360° low impedance grounding of cable shield at bulkhead
- Easily installed and low cost
- Must meet EMMI shielding requirements for commercial applications

KEY CUSTOMER REQUIREMENTS

- Low volume resistivity (.01 ohm-cm)
- Excellent elongation (100% min.) and tensile strength (200 psi, 1.38 MPA, min.)
- Lower cost solution compared with connectors with backshells
- Custom molded part provides an exceptional fit with easy installation

CONCLUSION

Parker Chomerics CHO-SEAL® 1310 silver-plated-glass-filled silicone elastomer provided a low cost, rugged shielded cable grommet that met the needs of this component manufacturer for electrical grounding purposes.

THE SOLUTION

The cable shield ground termination was achieved by applying a molded conductive elastomer grommet of Parker Chomerics CHO-SEAL® 1310 silver-plated-glass-filled silicone elastomer.

The CHO-SEAL 1310 material provides excellent electrical conductivity, with superior elongation and tensile strength properties. The molded elastomer grommet installs easily and provides excellent cable shield termination. The conductive grommet not only provides the low impedance shield termination, but offers cable strain relief.

