



ULTRAMINIATURE CIRCULAR

Series 806

Mighty Mouse

Mil-Aero Connectors



Advanced mil-aero performance in a reduced size and weight package

Series 806 offers significant size and weight savings for EWIS designers while meeting key military and aerospace performance benchmarks for high-altitude, unpressurized zone voltage ratings, altitude immersion, shock and vibration. The Series 806 Mil-Aero features mechanical design innovations—including durable mechanical insert retention, radial seals and triple-ripple grommet seals for environmental protection, and enhanced corrosion protection—that deliver longer connector life for lower total installed cost. Its reduced thread pitch and re-engineered ratchet prevent decoupling problems, particularly in small shell sizes, solving one of the major problems of shell size 9 and 11 MIL-DTL-38999 Series III connectors.

SAVE SIZE AND WEIGHT WITH SERIES 806 CONNECTORS

Series 806 Mil-Aero
Smallest Size
.500 In. Mating Threads
3 #20 Contacts or 7 #22
contacts



MIL-DTL-38999
Smallest Size
.625 In. Mating Threads
3 #20 Contacts or 6 #22
contacts

- Next-generation small form factor aerospace-grade circular connector
- Upgraded environmental, electrical and mechanical performance
- Integrated anti-decoupling technology
- Higher density 20HD and 22HD contact arrangements
- Glass hermetic, lightweight aluminum hermetic, and filtered versions
- +200° C temperature rating
- Integral Nano-Band shield termination platform



About The Series 806

The Mighty Mouse Series 806 Mil-Aero is an aerospace-grade ultraminiature circular connector with triple-start threaded coupling. The 806 connector is smaller and lighter than traditional aerospace connectors. Featuring size 20HD and 22HD contacts, the Series 806 offers up to twice the number of contacts with no reduction in performance. Independent laboratory testing has demonstrated that the Series 806 meets the requirements of MIL-DTL-38999 Series III.

But there is more to the 806 than size and weight reduction. This new high-performance connector has many innovative features that meet the most aggressive requirements of the military/aerospace industry. One such feature is better resistance to vibration-induced decoupling. This is accomplished by re-engineering the ratchet mechanism and introducing a shallower mating thread ramp angle.

Glenair pioneered integral banding platforms to allow direct attachment of cable shields, boots and overmolds. This innovation continues with the 806, Glenair's first connector to exclusively use the ultralightweight Nano-Band for maximum size and weight reduction.

Another enhancement is a "top hat" insulator with raised bosses for foolproof alignment of insulator cavities and retention clips as well as higher voltage ratings.

The 806 series connector features an O-ring radial interface sealing design instead of a flat gasket. This allows for easier metal-to-metal coupling, improved sealing, and better EMI performance. The MIL-DTL-38999 Series III and other legacy aerospace circular connectors have a flat gasket inside the receptacle shell. This peripheral seal must be compressed sufficiently to allow full metal-to-metal connector bottoming. In certain tolerance conditions this seal can make it difficult to fully mate the connectors "without the use of tools" as is required by MIL-DTL-38999.

Save Size and Weight with Series 806 Connectors
Mighty Mouse Mil-Aero Is The Next Generation Higher Density Connector for Demanding Aerospace and Defense Applications



MIL-DTL-38999 Series 806

Series 806 plug with 19 #22 contacts compared to MIL-DTL-38999 Series III with 6 #22 contacts. More than 3X the number of contacts, yet only .020 inches larger diameter.

