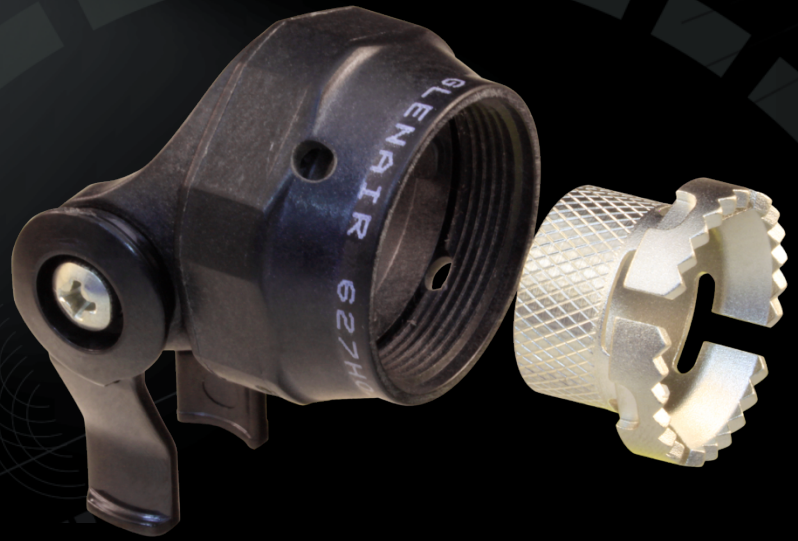
The widest range of mission-critical interconnect technologies in the world



Glenair®

Composite Thermoplastic Backshells and Accessories

Composite Thermoplastic

A combination of high-tech materials with some performance advantages compared to metal

- *Composite:* Particle and fiber additives suspended in a Polymer resin
- *Polymer:* Shapeable chemicals formed into complex molecular chains with specific attributes
- *Thermoplastic:* Heat moldable polymer that returns to a solid state upon cooling

Composites: Lighter Weight

Composite systems and components are consistently 20 – 30% lighter than equivalent-functionality metal parts

Composites: Unlimited Corrosion Protection

Composite

Composite thermoplastic based materials are not subject to any form of corrosion—a key requirement in harsh environments.

Glenair

Composites: Superior Manufacturability

- Injection molded (tooled) composite parts are faster and easier to make than machining metal.
- Intricate features are easier to mold than die-casting metal

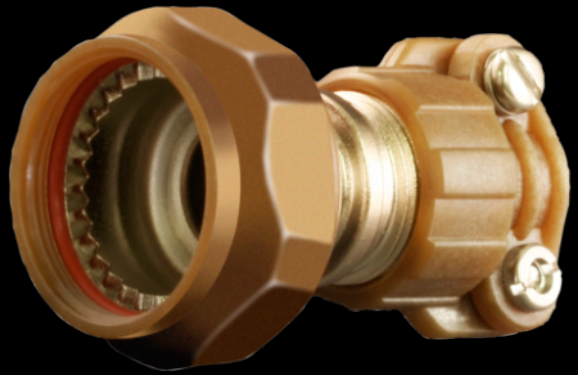
Composites: Excellent Temperature Tolerance

Composite thermoplastic components meet all commercial aviation and mil-spec temperature requirements for all zones except engines and engine nacelles

Composites: Inherent Vibration Dampening

Composites pass even the most stringent vibration and shock tests with flying colors

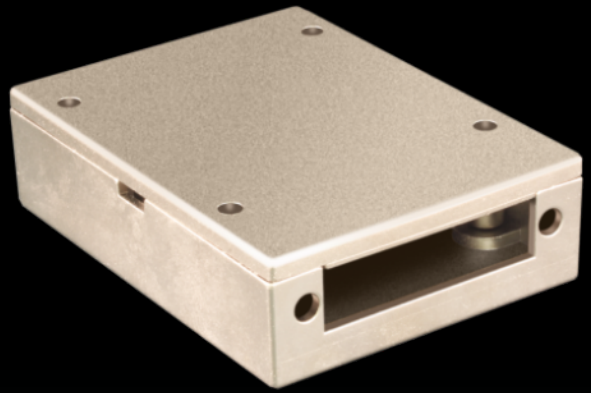
Metal: Rings like a rusty old bell



Doesn't vibrate loose

Composites: Integrated “Snap” Fasteners

Injection-molded composite plastic products may be designed with integrated fasteners in the form of clips and snaps



Composites: Resistance to Lightning Strike

Composite backshells meet the same indirect lightning strike requirements as required in D38999 series III metal connectors

Composites: Superior Dimensional Stability

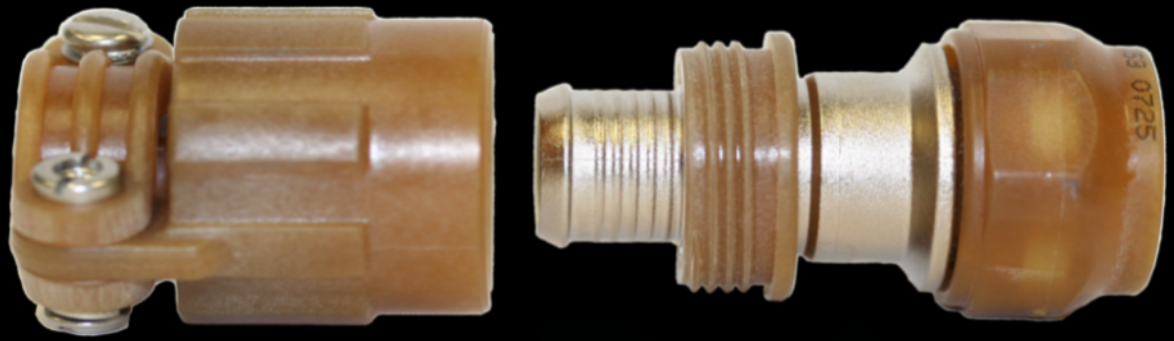
Due to a low coefficient of linear thermal expansion, composite interconnect components do not expand or contract with changes in temperature

Composites: Other Material Properties

- Easier to manufacture, melt-processable polymers
- Ideal for small component parts
- Insensitive to aircraft fluids or chemical attack
- Resistant to flames
- Low smoke, low toxicity index
- Resistant to hydrolysis, UV radiation
- PEEK and PEI offer high dielectric strength and excellent mechanical performance

Selective Plating: The Glenair Approach to EMI Grounding and Product Durability

Selective Plating Maintains an Effective Ground Path While Eliminating Surface Scratches and Other Damage



Shown: Series 447 Composite Band-in-a-Can Backshell

Performance Testing of Ultem

Performance by Application Requirements	Capability	Test Method Employed		Similarity to EN 2591-
		MIL-STD-1344	EIA 364-	
Corrosion (Salt Spray, Salt Mist)	2000 Hours +	1001	26	307
Shell Conductivity	< .0025 Ohms	3007	83	205
Fluid Immersion	Passed	1016	10	315
Ozone Exposure	Passed	1007	14	316
Fungus (mold growth)	Inert	ASTM G 213	N/A	306
Flammability	Passed	1012	104	317
Hydrolytic Stability	Passed	ASTM D 570-95	N/A	Unknown
Life Cycle (mate un-mate 10 cycles)	Passed	AS85049 par. 4.6.15	N/A	408
Vibration	Passed	2005	28	403
Shock	Passed	2004	27	402
Temperature Cycling (rapid change of temperature & Thermal shock)	Passed	1003	32	323 / 305
Lightning Strike (3KA, 5KA, 10KA)	Passed	5PTC0000, par. 4.5.13	75	214
External Bending Moment	Passed	AS85049 par. 4.6.11	N/A	420
Endurance at Temperature	Compliance Verificaiton Required	N/A	N/A	301
Climatic Sequence		N/A	N/A	302
Cold/Flow Pressure & Damp Heat		N/A	N/A	303
Humidity (Damp Heat Steady State)		1002	31	304
Sand & Dust		N/A	50	308
Damp Heat Cycle Test (10 cycles)		N/A	N/A	321
Axis Load		N/A	N/A	405
Surface Transfer Impedance		3008	66	212

Connector Accessory Series Summary

Composite

Shield Termination

Environmental Sealing

Mechanical Strain-Relief

Lightweight Composite

Protective Covers

Molded Shapes

Glenair

Every AS85049 Slash Sheet Plus Thousands of Commercial Designs

All Manufactured in Glendale, California

QPL qualified

Weight Saving Composite Technologies for Advanced Aircraft

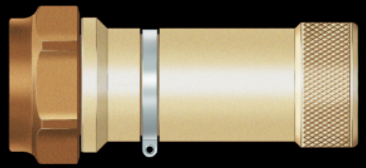
Composite

Swing-Arm Flex with Slotted Follower

Ultra-Low-Profile Composite Backshell

Composite Do-Drop-In Series

Swing-Arm with Integrated Shield Sock



Composite Shorting Can

Composite ARINC Backshells

Composite EPX Backshells

Series 20 Super-Twin

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Saving Assembly Time and Labor:

Split-Shells for Easy Access

Composite

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Composite

Saving Assembly Time and Labor:

Easy Thru-Bulkhead Wire Routing

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The Swing-Arm Revolution

Operates in a similar manner to the F-22 Shield Sock, but offers three-in-one straight, 45° and 90° design for SKU reduction

Composite

WEIGHT-SAVING, CORROSION-FREE

SWING ARM®
COMPOSITE THREE-IN-ONE BACKSHELL
FLEX

COMPOSITE THERMOPLASTIC CONNECTOR BACKSHELLS

Glenair®

Swing-Arm Flex

SWING ARM®
COMPOSITE THREE-IN-ONE BACKSHELL
FLEX

"Flex" Swing-Arm Technology

Swing-Arm Flex with slotted drop-in follower

- Straight, 45°, and 90° configurable backshell: 3 part numbers in one!
- Further weight reduction with no saddle bars or hardware
- No excessive tape use on bundle
- Rapid assembly
- Band, lacing cord or tie wrap be used
- Accommodates wide range of cable bundle diameters

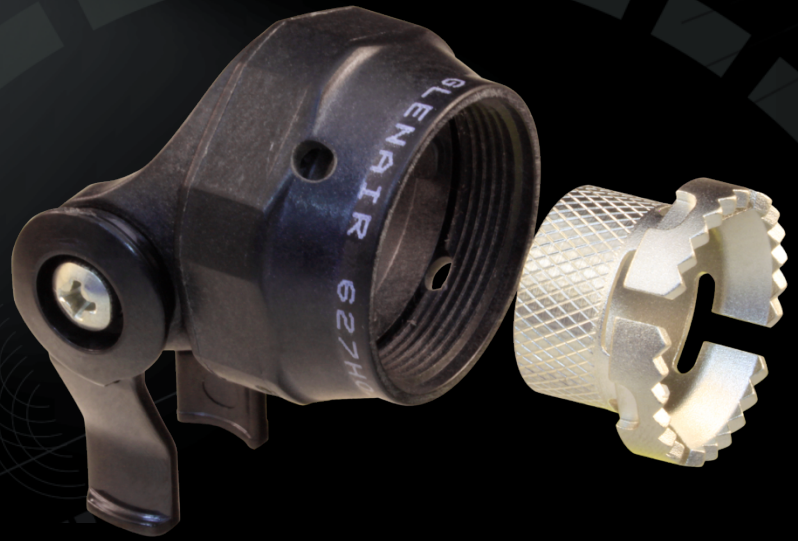
Glenair®

Small and Light EMI/RFI Shielded Junction Boxes

Tested, qualified, tooled and stocked catalog offerings

Series 140 Composite EMI/RFI Junction Boxes

The widest range of mission-critical interconnect technologies in the world



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