SERIES 77

Heat Shrink Boots, Sleeves, and Adapters

Heat shrink boots provide mechanical and environmental protection to connector-to-cable transitions. Specially formulated polymers are injection-molded, then heated and expanded. The shape-memory property of the material allows it to return to its original shape when heated with a hot air gun. Glenair Series 77 Heat Shrink Boots are available in six material types, including Zero Halogen Polyolefin for regulated environmental safety applications and Low Outgassing Fluoropolymer Alloy that meets NASA requirements. Series 77 boots are also TACOM qualified to SC-X15111D specifications and our Type 1 high-performance material can be ordered in 10 optional colors to match cable colors or provide color coding. Properly applied, these adhesive-lined shrink boots provide a dependable, leak-proof seal for interconnect cable assemblies. The following shapes/types are available in stock for immediate, same-day shipment:

- Lipped adapter shrink boots
- Lipless adapter shrink boots
- "Wye" and "tee" transitions
- Piggyback boot adapters

EXPANDED VS. RECOVERED BOOTS

Shrink boots are supplied in expanded form. The boot is heated, stretched on a mandrel, then cooled. The boot retains its expanded form until heat is applied. Application of heat restores the boot to its original dimensions.

APPROVALS

- **RoHS Compliant: All Series 77 Shrink boots are fully RoHS compliant, including adhesive-lined versions**
- **Airbus Defense & Space, Bomabardier, Gulfstream, TACOM, NAVSEA 5617649, and AS85049: M85049/140 (straight boots, /141 (90 degree boots) and /142 (wide-body transition including T, Y, and 1-to-3)**

Recovered Right Angle Boot

Expanded Right Angle Boot

SERIES 77

Heat Shrink Boots, Sleeves and Adapters

Shrink Boot Typical Material Properties								
Property	**Type 1** High Performance Elastomer	**Type 2** Zero Halogen Polyolefin	**Type 3** General Purpose Polyolefin	**Type 5** Viton Fluoroelastomer Blend	**Type 6** High Performance Elastomer Alloy	**Type 7** Flexible Polyolefin	**Type 8** Low Outgassing Fluoropolymer Alloy	**Type 9** Low Temp Flexible Polyolefin
Flexibility	Semi-rigid	Semi-flexible	Flexible	Flexible	Flexible	Highly Flexible	Semi-rigid	Flexible
Operating Temperature Range	-75°C to +150°C	-40°C to +130°C	-55°C to +135°C	-55°C to +150°C	-55°C to +135°C	-55°C to +135°C	-50° C to +175° C	-40° C to +100° C
Shrink Temperature (min.)	135°C	120°C	120°C	135°C	135°C	120°C	135°	70°
Tensile Strength (psi)	1700	1100	1400	2200	1500	1400	1700	1700
Elongation (% min.)	400	250	400	400	300	250	300	500
Thermal Endurance (Elongation 50% min)	3000 hrs, 150°C	3000 hrs, 130°C	--	--	--	--	--	--
Heat Shock	4 hrs, 215°C	4 hrs, 200°C	4 hrs, 225°C	4 hrs, 225°C	4 hrs, 220°C	4 hrs, 250°C	4 hrs, 225°C	4 hrs, 150°C
Heat Aging	168 hrs, 160°C	168 hrs, 175°C	168 hrs, 175°C	168 hrs, 150°C	168 hrs, 150°C	168 hrs, 175°C	168 hrs, 150°C	168 hrs, 175°C
Dielectric Strength (V/mil)	300	380	250	200	200	300	200	200
Volume Resistivity (ohms-cm)	10^{13}	10^{12}	10^{12}	10^{10}	10^{10}	10^{12}	10^{10}	10^{10}
Water Absorption (%)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Flammability	Burn Time <15 sec Burn Length <25mm	Burn Time <15 sec Burn Length <25mm	Burn Time <120 sec Burn Length <25mm	Burn Time <120 sec Burn Length <25mm	Burn Time <120 sec Burn Length <25mm	Burn Time <90 sec Burn Length <25mm	Burn Time <60 sec Burn Length <25mm	Burn Time <120 sec Burn Length <25mm
RoHS Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Oxygen Index (% min.)	--	>30%	--	--	--	--	--	--
Temperature Index (°C)	--	>250° C	--	--	--	--	--	--
Smoke Index (max.)	--	<20	--	--	--	--	--	--
Toxicity Index (max.)	--	<3 Per 100 gms	--	--	--	--	--	--
Outgassing	--	--	--	--	--	--	CVCM <0.1% TML <1%	--

Shrink Boot Fluid Resistance								
Fluid	**Type 1** High Performance Elastomer	**Type 2** Zero Halogen Polyolefin	**Type 3** General Purpose Polyolefin	**Type 5** Viton Fluoroelastomer Blend	**Type 6** High Performance Elastomer Alloy	**Type 7** Flexible Polyolefin	**Type 8** Low Outgassing Fluoropolymer Alloy	**Type 9** Low Temp Flexible Polyolefin
Lubricating Oil	Very good	Good	Good	Excellent	Excellent	Good	Excellent	Fair
Hydraulic Fluid	Very Good	Good	Good	Excellent	Excellent	Good	Excellent	Fair
Aviation Fuel	Very Good	Good	Good	Excellent	Excellent	Fair	Excellent	Fair
Gasoline	Very Good	Fair	Fair	Excellent	Excellent	Good	Excellent	Fair
De-Icing Fluid	Excellent	Very Good	Good	Excellent	Excellent	Good	Excellent	Fair
Automotive Diesel	Good	Fair	Very Good	Excellent	Excellent	Fair	Excellent	Fair