



SERIES 77
Heat Shrink Boots



Compound Material Specifications
Type 6 Material: 2051 Elastomer Polymer Alloy

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GTS 4079: Heat-Shrinkable Elastomer Polymer Alloy (EPA)
Operating Temperature Range: -55°C to 135°C

This Material Specification establishes the quality standard for a heat-shrinkable EPA compound used to manufacture Glenair® molded components. All testing of molded shapes are specified in SCD7090. All testing to be carried out on molded sheets 2mm thick unless otherwise specified. For system tests size S06 boots with type 779-001 two-part epoxy adhesive with 25mm aluminum backshells and 15mm Neoprene jacketed cable shall be used.

Installation Temperature: Minimum 135°C, Recovered 150°C

Compound 2051 Type 6 - Materials Specification		
Test	Test Procedure	Test Requirement
Visual Examination		Homogenous and essentially free from pinholes, bubbles, flaws, cracks and inclusions, color is black
Tensile Strength	IEC 62329-2	10.3 MPa minimum
Ultimate Elongation	IEC 62329-2	300% minimum
Hardness	IEC 62329-2	85 ±10 Shore A
Stiffness	ASTM D747	<40MPa
Specific Gravity	IEC 62329-2	<1.5
Heat Shock 4hrs at 225°C	IEC 62329-2	No dripping or flow Helical bend 20mm diameter, no cracking Tensile Strength 13.8 MPa minimum Ultimate Elongation 300% minimum
Heat Aging 168hrs at 100°C	IEC 62329-2	Tensile strength 10.3 MPa minimum Ultimate elongation 300% minimum
Low Temperature Flexibility 4hrs at -65°C	IEC 62329-2	No cracking
Flammability	IEC 62329-2	Time of burning < 60secs Length of burning < 25mm
Water Absorption 24hrs at 23°C	IEC 62329-2	0.5% maximum
Electric Strength	IEC 62329-2	12 MV/m minimum
Volume Resistivity	IEC 62329-2	10 ¹² ohms cms minimum
Fungus Resistance	IEC 62329-1	<1
Fluid Resistance 24hrs Immersion at 23°C Petrol, Diesel, Jet Fuel JP8	IEC 62329-2	Tensile Strength > 7 MPa Elongation > 250%
COMPATIBILITY TESTING		
Dynamic Shear Room Temperature 100°C	IEC 62329-2	>300 N 15mm cable >30N 15mm cable
Peel Adhesion Boot to Adaptor Boot to Cable	IEC 62329-2	>60N/25mm >60N/25mm

Glenair 2051 material meets the requirements of SC-X15112C
Listed in the NASA MAPTIS (Material and Process Technical Information System) database