HellermannTyton

Hellermannitest Hellermannites

Article Number: 333-41509

Heat Shrink Tubing, 4' Long Stick, 3:1 Shrink Ratio, 3/16", 4.8/1.5 Dia, PO, Black, 20/pkg

Base Data		
	Local Order Number	333-41509
	Type	TFN31-ST-4.5/1.5
	Color	Black (BK)
	Features and Benefits	Thin wall, flexible 3 to 1 shrink ratio material accommodates a wide range of component shapes and diameters. Meets UL224 VW-1 specifications, making it ideal for high heat applications (excludes clear tubing). Polyolefin material provides excellent insulation and mechanical strength with good resistance to solvents, oils and fuels. Available in bulk reels, sticks and convenience bags (HIS-3 bags), for small to large volume applications.
	Quantity Per	lengths
	Product Description	TFN31 series heat shrink tubing features a flexible, thin wall and highly flame retardant polyolefin material with a higher operating temperature range than general-use heat shrink tubing. and offers good resistance to solvents, oils and fuels. The 3 to 1 shrink ratio accommodates a variety of component shapes and sizes. TFN31 tubing is available in bulk reels, sticks and convenience bags (HIS-3 bags), for projects of all sizes.
	Short Description	Heat Shrink Tubing, 4' Long Stick, 3:1 Shrink Ratio, 3/16", 4.8/1.5 Dia, PO, Black, 20/pkg
Product Dimensions		
	Length L (Metric)	1.22m
	Printable (Yes/No)	No
	Shrink Ratio	3:1
	Trade Size	3/16 "
	Variant	Thin-Wall
	Volume Resistance (Ohm cm)	10 ¹⁴ Ω cm
	Nominal Diameter (Imperial)	3/16"
	Nominal Diameter (Metric)	4.5mm
	Wall Thickness WT (Imperial)	.024"
	Wall Thickness WT (Metric)	0.60mm
	Recovered Diameter d (metric)	1.5mm

generated on: 4/28/2017

333-41509



Product Dimensions Recovered Diameter d (imperial) 0.094*			
Supplied Diameter D (imperial) University Universit		Recovered Diameter d (imperial)	0.094"
Material and Specifications Material Polyolefin, cross-linked (PO-X) Material Shortcut PO-X Dielectric Strength (Metric) < qy/>20 kV/mm Elongation at break 600% Flammability UL 224 VW-1 Halogenfree No Shrink Temperature +158 °F (+70 °C) Operating Temperature -67°F to +275°F (-55°C to +135°C) ROHS Compliant Yes Certification/Specification UL ANSI/UL 224 UL Recognized (US) Yes Logistic and Packaging Package Quantity (Imperial) 20 Package Quantity (Imperial) 20		Supplied Diameter D (imperial)	0.188"
Material Polyolefin, cross-linked (PO-X)		Supplied Diameter D (metric)	4.5mm
Material Shortcut PO-X Dielectric Strength (Metric) <pre> cgt/>20 kV/mm Elongation at break 600% Flammability UL 224 VW-1 Halogenfree No Shrink Temperature +158 °F (+70 °C) Operating Temperature -67°F to +275°F (-55°C to +135°C) ROHS Compliant Yes Certification/Specification UL ANSI/UL 224 UL Recognized (US) Yes Logistic and Packaging Package Quantity (Imperial) 20 Package Quantity (Metric) 20</pre>			
Dielectric Strength (Metric)		Material	Polyolefin, cross-linked (PO-X)
Elongation at break 600% Flammability UL 224 VW-1 Halogenfree No Shrink Temperature +158 °F (+70 °C) Operating Temperature -67°F to +275°F (-55°C to +135°C) ROHS Compliant Yes Certification/Specification UL ANSI/UL 224 UL Recognized (US) Yes Logistic and Packaging Package Quantity (Imperial) 20 Package Quantity (Metric) 20		Material Shortcut	PO-X
Flammability Halogenfree No Shrink Temperature Operating Temperature Flammability H158 °F (+70 °C) Operating Temperature G7°F to +275°F (-55°C to +135°C) ROHS Compliant Yes Certification/Specification UL ANSI/UL 224 UL Recognized (US) Yes Logistic and Packaging Package Quantity (Imperial) Package Quantity (Metric) 20		Dielectric Strength (Metric)	<gt></gt> 20 kV/mm
Halogenfree No Shrink Temperature +158 °F (+70 °C) Operating Temperature -67°F to +275°F (-55°C to +135°C) ROHS Compliant Yes Certification/Specification UL ANSI/UL 224 UL Recognized (US) Yes Logistic and Packaging Package Quantity (Imperial) 20 Package Quantity (Metric) 20		Elongation at break	600%
Shrink Temperature +158 °F (+70 °C) Operating Temperature -67°F to +275°F (-55°C to +135°C) ROHS Compliant Yes Certification/Specification UL ANSI/UL 224 UL Recognized (US) Yes Logistic and Packaging Package Quantity (Imperial) 20 Package Quantity (Metric) 20		Flammability	UL 224 VW-1
Operating Temperature -67°F to +275°F (-55°C to +135°C) ROHS Compliant Yes Certification/Specification UL ANSI/UL 224 UL Recognized (US) Yes Logistic and Packaging Package Quantity (Imperial) 20 Package Quantity (Metric) 20		Halogenfree	No
ROHS Compliant Certification/Specification UL ANSI/UL 224 UL Recognized (US) Yes Logistic and Packaging Package Quantity (Imperial) Package Quantity (Metric) 20		Shrink Temperature	+158 °F (+70 °C)
Certification/Specification UL ANSI/UL 224 UL Recognized (US) Yes Logistic and Packaging Package Quantity (Imperial) Package Quantity (Metric) 20		Operating Temperature	-67°F to +275°F (-55°C to +135°C)
UL Recognized (US) Logistic and Packaging Package Quantity (Imperial) Package Quantity (Metric) 20		ROHS Compliant	Yes
Logistic and Packaging Package Quantity (Imperial) 20 Package Quantity (Metric) 20		Certification/Specification	UL ANSI/UL 224
Packaging Package Quantity (Imperial) 20 Package Quantity (Metric) 20		UL Recognized (US)	Yes
Package Quantity (Metric) 20	Logistic and Packaging		
		Package Quantity (Imperial)	20
Customs Number(Schedule B) 3926909987		Package Quantity (Metric)	20
		Customs Number(Schedule B)	3926909987

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