

Part Number BBT (1K-10K)

Header BBT Heat-Shrinkable Bus Bar Tubing

Description Thermosleeve-USA BBT (1kV/10kV) is a well insulated and track-resistant, heat-shrinkable polyolefin used to protect rectangular, square and round bus bars found in low or medium voltage switching equipment.

Agency Approval & Compliance ROHS, Halogen Free, Flame Retardant, REACH

Application Thermosleeve-USA BBT (1kV/10kV) is used to protect rectangular, square and round bus bars found in low or medium voltage switching equipment or for inline bolted connections of bus bars.

Shrink Ratio and Operating Temperature BBT (1kV/10kV) is available as a 2:1 material, shrinking to one half (50%) of its supplied size. The tubing's wall thickness also changes proportionally to the degree of recovery.

BBT (1kV/10kV) high temperature heat shrink has a shrink temperature range of 90 degrees C (194 degrees F) to 120 degrees C (248 degrees F) <note: the certification shows a operating temperature of 125°C and a shrink temperature of 90 – 120°C>

Standard Sizes and Dimension



BBT-1kV

Size (inches)	Size (mm)	As Supplied (mm)		After Recovery (mm)		Bus Bar Size	
		Inside Dia. (D)	Wall Thick. (T)	Inside Dia. (d)	Wall Thick. (t)	Rectangle (W)	Round (D)
51/64"	20/10	20±1.0	0.55±0.25	10	1.20±0.25	20	15
1-1/4"	30/15	31.5±1.0	0.55±0.25	15	1.20±0.25	30	20
1-9/16"	40/20	40.5±1.5	0.60±0.30	20	1.20±0.25	40	30
2"	50/25	50.5±2	0.60±0.30	25	1.20±0.25	50	35
2-3/8"	60/30	60±3	0.60±0.30	30	1.20±0.25	60	45
2-3/4"	70/35	70±3	0.60±0.30	32	1.20±0.25	70	50
3"	80/40	80±3	0.70±0.35	40	1.45±0.30	80	55
3-1/2"	90/45	90±4	0.70±0.35	43	1.45±0.30	90	65
4"	100/50	100±4	0.70±0.35	50	1.45±0.30	100	75
5"	120/60	120±4	0.70±0.35	60	1.45±0.30	120	85
6"	150/75	150±4	0.70±0.35	75	1.45±0.30	150	105

BBT-1kV Typical Properties

Item	Test Method	Specifications
Shrink Temperature (°C)		90~120°C
Operating Temperature Range (°C)		125°C
Tensile Strength (Mpa)	ASTM D2671	≥10Mpa
Elongation at break (%)	ASTM D2671	≥300
Aging in Circulating-air Oven	ASTM D2671	158.0±2.0°C, 168hrs
After Aging - Tensile Strength (Mpa)	ASTM D2671	≥7.3
After Aging - Ultimate Elongation (%)	ASTM D2671	≥200
Flexibility at -40°C, 4h	ASTM D2671	No cracking
Volume Resistance (Ω .cm)	ASTM D876	≥10 ¹⁴
Dielectric Strength (kV/mm)	ASTM D2671	≥25
Heat shock	200°C±3°C, 4h	No cracking
Oxygen index	ASTM D2863	≥30
Water absorption	ASTM D570A	<0.5%

BBT-10kV

Size (inches)	Size (mm)	As Supplied (mm)		After Recovery (mm)		Cable Range (mm ²)
		Inside Dia. (D)	Wall Thick. (T)	Inside Dia. (d)	Wall Thick. (t)	
3/4"	20/8	20±0.8	1.10±0.30	8	2.60±0.20	20
63/64"	25/10	25±0.8	1.10±0.30	10	2.60±0.20	30
1-1/4"	30/12	30±0.8	1.10±0.30	12	2.70±0.20	30
1-3/8"	35/14	35±0.8	1.10±0.30	14	2.70±0.20	
1-1/2"	40/15	40±1.0	1.10±0.30	15	2.90±0.30	40
1-49/64"	45/18	45±1.0	1.10±0.30	18	2.90±0.30	
2"	50/20	50±2.0	1.10±0.30	20	2.90±0.30	50
2-1/16"	54/24	54±3.0	1.10±0.30	24	2.90±0.30	
2-3/8"	60/24	60±3.0	1.10±0.30	24	2.90±0.30	60
2-1/2"	65/25	65±3.0	1.10±0.30	25	2.90±0.30	
2-61/64"	75/30	70±3.0	1.10±0.30	30	2.90±0.30	
3"	80/32	80±4.0	1.10±0.30	32	2.90±0.30	80/100
3-11/32"	85/35	85	1.10±0.30	35	2.90±0.30	
4"	100/40	100±4.0	1.10±0.30	40	2.90±0.30	100/120
5"	120/48	120±4.0	1.10±0.30	48	2.90±0.30	150
6"	150/60	150±4.0	1.10±0.30	60	2.90±0.30	200
7"	180/70	180±4.0	1.10±0.30	70	2.90±0.30	

12753 Moore St. Cerritos, CA 90703 **Local** (562) 404-9998 **Fax** (562) 404-9698 **Nationwide** (800) 421-3536
Order Fax (800) 421-3538 **E-mail** sales@thermosleeve-USA.com **Website** <http://www.thermosleeve-usa.com>

BBT-10kV Typical Properties

Item	Test Method	Specifications
Shrink Temperature (°C)		90~120°C
Operating Temperature Range (°C)		125°C
Tensile Strength (Mpa)	ASTM D2671	≥10Mpa
Elongation at break (%)	ASTM D2671	≥450
Aging in Circulating-air Oven	ASTM D2671	158.0±2.0°C, 168hrs
After Aging - Tensile Strength (Mpa)	ASTM D2671	≥7.3
After Aging - Ultimate Elongation (%)	ASTM D2671	≥200
Flexibility at -40°C, 4h	ASTM D2671	No cracking
Volume Resistance (Ω .cm)	ASTM D876	≥10 ¹⁴
Dielectric Strength (kV/mm)	ASTM D2671	≥25
Heat shock	200°C±3°C, 4h	No cracking
Oxygen index	ASTM D2863	≥30
Water absorption	ASTM D570A	<0.5%

Availability Four-foot lengths, master reels and cut pieces

Important Notice The information related to Thermosleeve-USA products both in printed or electronic format is believed to be reliable but the accuracy and completeness is not guaranteed. We suggest that before using this product, you evaluate and determine if it is suitable to your intended application. Thermosleeve-USA assumes no risk or liability associated with the use of this material. Any statements related to this product that are not contained in the current Thermosleeve-USA online or printed literature, or any contrary statements referenced on purchase order, shall have no force or effect unless expressly agreed to in writing and signed by an office of Thermosleeve-USA.

Limited Warranty/Limited Liability Thermosleeve-USA offers no guarantees in respect to the accuracy of the information detailed in this document and accepts no explicit or applied liability as to the products use. In no instance will Thermosleeve-USA be liable for any eventual, indirect or consequential damage or damages arising from the sale, resale, transfer, use or misuse of the product. Thermosleeve-USA specifications are subject to change without notice; including changes in materials and processing that do not affect compliance of the products specification. Thermosleeve-USA guarantees the product to be free from defects in material and manufacturing at the time of purchase. If this product is found to be defective within the warranty period, at our option we will refund the purchase price, replace or repair the Thermosleeve-USA product.