ET05416001 ✔ ACTIVE

BIOFUSE | BIOFUSE BISS

TE Internal #: ET05416001

Heat Shrink Tubing, Black, 4:1, Dual Wall, Shrinks To 4.45 mm [.175 in], Bio-Based Irradiated Modified Polyolefin, BIOFUSE BISS

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Heat Shrink Tubing



Primary Product Color: **Black**

Expanded Inside Diameter (Min): **18.3 mm [.72 in]**

Recovered Inside Diameter (Max): **4.45 mm [.175 in]**

Primary Product Material: **Bio-Based Irradiated Modified Polyolefin**

Wall Type: **Dual Wall**

Features

Product Type Features

Wall Type	Dual Wall
Tubing Product Type	Heat Shrink Tubing

Electrical Characteristics

Operating Voltage (Max)	.6 kV

Body Features

Fluid Type	(ATF) Automatic Transmission Fluid, Battery Acid, Brake Fluid, Diesel Fuel, Engine Cleaner, Engine Coolant, Engine Oil, Petrol without oxygen compounds, Windshield Washer Fluid
Primary Product Color	Black
Primary Product Material	Bio-Based Irradiated Modified Polyolefin
Shrink Ratio	4:1
Flexibility	Semi-Rigid

Dimensions

Recovered Wall Thickness (Nominal)	2.41 mm[.095 in]
Product Length	50 mm[1.969 in]
Expanded Inside Diameter (Min)	18.3 mm[.72 in]
Recovered Inside Diameter (Max)	4.45 mm[.175 in]

Tubing Size Range	4.45 – 18.3 mm[.175 – .72 in]

Usage Conditions

Resistance Properties	Immersion Protection, Moisture
Shrink Temperature (Min)	110 °C
Operating Temperature Range	-40 – 125 °C[-40 – 257 °F]
Tubing Flammability Type	Flame-Retardant
Recovery Temperature	135 °C

Operation/Application

Mechanical Resistance	Abrasion, Fluids, Strain Relief

Product Availability

Applicable Region	Global

Packaging Features

Packaging Method	Box

Other

Meets Low Outgassing Requirements	No
Product Source	China, Czech Republic

Product Compliance

For compliance documentation, visit the product page on TE.com>

EU RoHS Directive 2011/65/EU	Compliant
EU ELV Directive 2000/53/EC	Compliant
China RoHS 2 Directive MIIT Order No 32, 2016	有害物质含量符合标准要求 No Restricted Substance(s) Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2025 (250) Candidate List Declared Against: JAN 2025 (247) Does not contain REACH SVHC
Halogen Content	Not Low Halogen - contains Br or Cl > 900 ppm.
Solder Process Capability	Not applicable for solder process capability

Product Compliance Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these

limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked.Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulations, TE's information on SVHC in articles for this part number is still based on the European Chemical Agency (ECHA) 'Guidance on requirements for substances in articles'(Version: 2, April 2011), applying the 0.1% weight on weight concentration threshold at the finished product level. TE is aware of the European Court of Justice ruling of September 10th, 2015 also known as O5A (Once An Article Always An Article) stating that, in case of 'complex object', the threshold for a SVHC must be applied to both the product as a whole and simultaneously to each of the articles forming part of its composition. TE has evaluated this ruling based on the new ECHA "Guidance on requirements for substances in articles" (June 2017, version 4.0) and will be updating its statements accordingly.

Compatible Parts



TE Part # EG1114-000
CV1981-ST-230V1600W-EU

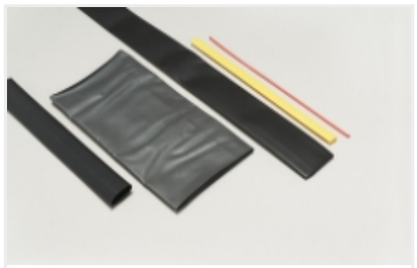
Also in the Series | BIOFUSE BISS



Bio-Based Heat Shrink Tubing(60)



Dual Wall Tubing(60)



Heat Shrink Tubing(60)

Customers Also Bought



TE Part #AS618-35SB
PLUG.BOOT TERMINN TYPE 6



TE Part #ET05396001
BISS-NO.3-0-50MM



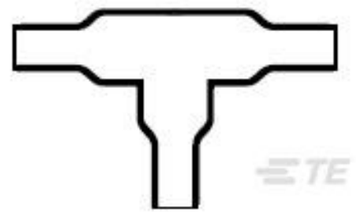
TE Part #ET05376001
BISS-NO.2-0-50MM



TE Part #5039264026
DR-25-3/8-0-SP



TE Part #5039304024
DR-25-1/2-0-SP



TE Part #497802-000
301A028-25-0



TE Part #AS618-35SN
PLUG.BOOT TERMIN'N TYPE 6



TE Part #ET05366001
BISS-NO.1-0-50MM



TE Part #AS618-35SA
PLUG.BOOT TERMIN'N TYPE 6



TE Part #5039324007
DR-25-1/8-0-SP

Documents

Product Drawings

BISS-NO.4-0-50MM

English

Datasheets & Catalog Pages

BIOFUSE TUBING: BISS

English

Product Specifications

Application Specification

English