

# ZHD-SCE LOW FIRE HAZARD DIESEL RESISTANT

HEAT SHRINK IDENTIFICATION SYSTEM

#### **Technical Datasheet**

TTDS-263 Revision 7 April 2017

ZHD-SCE Zero Halogen, Diesel Resistant, Heat Shrink Identification Marker Sleeves for the identification of wires and cables.

ZHD-SCE is presented as cut sleeves organised in ladder format.

Manufactured using a specially developed radiation cross-linked, zero halogen material. ZHD-SCE is designed specifically to bridge the gap for installations where the highest performance is demanded from an identification sleeve, without compromising on safety or capability.

ZHD-SCE Heat Shrink Identification Marker Sleeves are available as part of a complete identification system. The system comprises specific printers, thermal transfer ribbons and WINTOTAL software.

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# ZHD-SCE, LOW FIRE HAZARD, DIESEL RESISTANT

#### **HEAT SHRINK CABLE IDENTIFICATION SYSTEM**

#### **Features**

- · Zero Halogen
- Low Toxic Fumes
- Non-flame propagating
- Resistant to key rail and industrial fluids including diesel (defined by RW-2536)
- Shrink ratio 2:1
- · Pre-termination Cable Identification

#### **Temperature Rating**

-55°C to 125°C (-67°F to 257°F)

#### Sleeve diameters from 2.4mm to 38.1mm

http://www.te.com/usa-en/utilities/productcompliance.html

**Environmental Compliance** 

mine cyanurate

#### **Shelf Life**

Refer to TE document 408-121006 Cable Identification Shelf Life

No Halogens, Sulphur, Nitrogen, Phosphorus and Cadmium sources above trace level. The flame re-

tardant used in this product does not contain mela-

Further information and a downloadable declaration

at the 'TE Product Compliance Support Centre':

covering RoHS and REACH compliance can be found

#### **Applications**







#### Specifications / Approvals

**TE Connectivity Standard** 

RW-2536

**Rail Standards** 

EN45545-2, Hazard Classifications 1 and 2, In accordance with requirement set R22/R23

BS 6853 Code of practice for fire precautions in the design and construction of passenger carrying trains.

Interior minor use of materials of mass 100g to 500g vehicle category II

EN 50343 Rolling stock applications - Rolling stock - Rules for installation of cabling - Appendix H

NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems, Fire protection requirements, Interior Fire Propagation Resistance

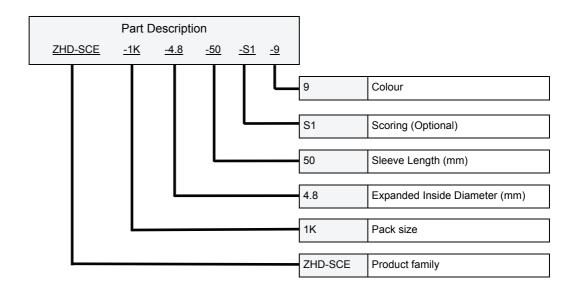
Federal Railroad Administration, DOT, Appendix B to Part 238, Test Methods and Performance Criteria for the Flammability and Smoke Emission Characteristics of Materials used in Passenger Cars and Locomotive Cabs

SHAZAINENNSHI, Japan Railway Rolling Stock & Machinery Association 2003 Classification 'Flame Retardant' Serial number 2015-166K

Where possible, TE has tested product as a finished item, including the print. Operational tests are followed by an assessment of mark adherence to validate fit form and function. Further details can be found in TE standard RW-2536.

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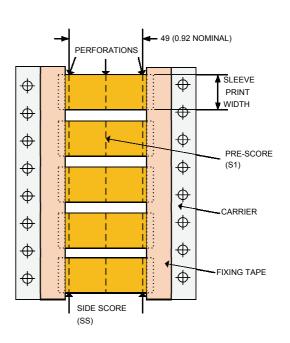




#### **Options**

Pre-scoring	Perforated score to produce multiple marker sleeves from each ZHD-SCE sleeve.								
	Not scored		Code	Blank					
	Side scored		Code	SS					
	Sided scored pre-score	with one	Code	SS1					
	1 Pre-score		Code	S1					
	2 Pre-scores		Code	S2					
Packaging sizes	<black></black>		250 piece packs available for all sizes						
	1K		1000 piece reels available for all sizes up to 25.4						
	2.5K		2500 piece reels available for sizes 4.8 up to 25.4						
	5K		5000 piece reels available for sizes 2.4 and 3.2						
Colours		Yellow	White						
	Code	4	9						
		Red	Green	Blue	Orange				
	Code	2	5	6	3				

Specify product name, pack size (leave blank for 250), sleeve size (in mm), sleeve length (always 50), pre-score (leave blank if not required) and colour



Dimensions in mm (inches)

#### **Ordering Information**

Ordering description		Inside diameter				B					
		As supplied (minimum)		After recovery (Maximum)		Recommended cable diameter use range					
		inches	mm inches		mm		inches				
ZHD-SCE - <pack size=""> - 2.4 - 50 - <score> - <colour></colour></score></pack>	2.4	0.094	1.19	0.047	1.27	to	1.90	0.050	to	0.075	
ZHD-SCE - <pack size=""> - 3.2 - 50 - <score> - <colour></colour></score></pack>	3.2	0.126	1.58	0.060	1.77	to	2.66	0.069	to	0.105	
ZHD-SCE - <pack size=""> - 4.8 - 50 - <score> - <colour></colour></score></pack>	4.8	0.189	2.36	0.090	2.54	to	4.06	0.100	to	0.160	
ZHD-SCE - <pack size=""> - 6.4 - 50 - <score> - <colour></colour></score></pack>	6.4	0.250	3.18	0.125	3.81	to	5.46	0.150	to	0.215	
ZHD-SCE - <pack size=""> - 9.5 - 50 - <score> - <colour></colour></score></pack>	9.5	0.375	4.75	0.187	5.59	to	8.12	0.220	to	0.320	
ZHD-SCE - <pack size=""> - 12.7 - 50 - <score> - <colour></colour></score></pack>	12.7	0.500	6.35	0.250	6.99	to '	10.79	0.275	to	0.425	
ZHD-SCE - <pack size=""> - 19.0 - 50 - <score> - <colour></colour></score></pack>	19.0	0.730	9.53	0.375	10.16	to '	16.25	0.400	to	0.640	
ZHD-SCE - <pack size=""> - 25.4 - 50 - <score> - <colour></colour></score></pack>	25.4	1.000	12.70	0.500	14.29	to 2	21.59	0.563	to	0.850	
ZHD-SCE - 38.1 - 50 - <score> - <colour></colour></score>	38.1	1.500	19.05	0.750	20.95	to 3	33.02	0.825	to	1.300	

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CLASS 1 DATA CLASSIFICATION - SEE POLICY TEC-02-04

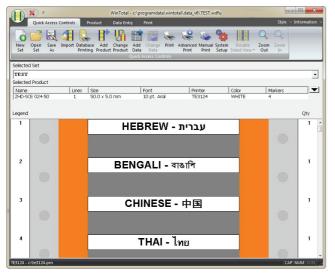


#### **Printer Information**

Print quality and print performance can only be guaranteed when specific TE printer and ribbons are used.

The current list of printers and ribbons can be found in TE document 411-121005 'Identification Printer Product Ribbon Matrix'. This document can be found in 'Access Our Tools':

http://www.te.com/usa-en/utilities/access-product-tools-and-resources.html



#### **Software**

WINTOTAL software, available to download for a 14 day evaluation period from the Identification Printer Software page:

http://www.te.com/usa-en/products/identification-labeling/printers-software.html

Contact a TE representative for further information



#### www.te.com/rail

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### **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## TE Connectivity:

ZHD-SCE-1K-4.8-50-4 ZHD-SCE-1K-9.5-50-S1-4 ZHD-SCE-1K-12.7-50-9 ZHD-SCE-3.2-50-4 ZHD-SCE-1K-3.2-50-S1-9 ZHD-SCE-38.1-50-S1-4 ZHD-SCE-1K-2.4-50-9 ZHD-SCE-6.4-50-4 ZHD-SCE-1K-19.0-50-S1-4 ZHD-SCE-5K-4.8-50-S1-4 ZHD-SCE-19.0-50-4 ZHD-SCE-9.5-50-9 ZHD-SCE-2.4-50-9 ZHD-SCE-19.0-50-S1-4 ZHD-SCE-5K-2.4-50-4 ZHD-SCE-9.5-50-4 ZHD-SCE-1K-3.2-50-S1-4 ZHD-SCE-12.7-50-4 ZHD-SCE-5K-3.2-50-4 ZHD-SCE-1K-2.4-50-S1-4 ZHD-SCE-1K-4.8-50-S1-9 ZHD-SCE-1K-4.8-50-9 ZHD-SCE-12.7-50-S1-9 ZHD-SCE-6.4-50-S1-4 ZHD-SCE-38.1-50-4 ZHD-SCE-9.5-50-S1-4 ZHD-SCE-2.4-50-4 ZHD-SCE-4.8-50-S1-4 ZHD-SCE-1K-3.2-50-4 ZHD-SCE-4.8-50-S1-9 ZHD-SCE-12.7-50-S1-4 ZHD-SCE-1K-6.4-50-9 ZHD-SCE-1K-6.4-50-S1-9 ZHD-SCE-1K-3.2-50-9 ZHD-SCE-1K-19.0-50-4 ZHD-SCE-2.4-50-S1-4 ZHD-SCE-2.5K-6.4-50-S1-4 ZHD-SCE-5K-2.4-50-S1-9 ZHD-SCE-1K-25.4-50-S1-9 ZHD-SCE-1K-12.7-50-4 ZHD-SCE-5K-3.2-50-9 ZHD-SCE-12.7-50-9 ZHD-SCE-1K-25.4-50-4 ZHD-SCE-5K-3.2-50-S1-9 ZHD-SCE-1K-6.4-50-S1-4 ZHD-SCE-1K-2.4-50-S1-9 ZHD-SCE-1K-25.4-50-S1-4 ZHD-SCE-1K-12.7-50-S1-9 ZHD-SCE-1K-6.4-50-4 ZHD-SCE-1K-2.4-50-4 ZHD-SCE-0.5K-38.1-50-S1-4 ZHD-SCE-5K-2.4-50-9 ZHD-SCE-1K-12.7-50-S1-4 ZHD-SCE-5K-3.2-50-S1-4 ZHD-SCE-4.8-50-9 ZHD-SCE-1K-25.4-50-9 ZHD-SCE-0.5K-38.1-50-9 ZHD-SCE-19.0-50-9 ZHD-SCE-2.5K-4.8-50-4 ZHD-SCE-3.2-50-S1-4 ZHD-SCE-3.2-50-9 ZHD-SCE-25.4-50-S1-4 ZHD-SCE-25.4-50-4 ZHD-SCE-1K-9.5-50-9 ZHD-SCE-1K-4.8-50-S1-4 ZHD-SCE-25.4-50-9 ZHD-SCE-5K-2.4-50-S1-4 ZHD-SCE-2.5K-4.8-50-S1-4 ZHD-SCE-1K-9.5-50-4 ZHD-SCE-1K-19.0-50-9 ZHD-SCE-1K-19.0-50-S1-9 ZHD-SCE-3.2-50-S1-9 ZHD-SCE-38.1-50-9 ZHD-SCE-6.4-50-9 ZHD-SCE-1K-9.5-50-S1-9 ZHD-SCE-4.8-50-4