

TECHNICAL DATA SHEET

TMS-90-SCE

Document number: TTDS-212

Issue: 1

Date: December 2011

HEAT SHRINK MARKER SLEEVE

Material Description:	General purpose flame retarded, radiation cross-linked, modified polyolefin heat-shrinkable marker sleeve. Assembled as organized cut sleeves in a "ladder" configuration. 3:1 and 2:1 shrink ratio products available.		
Use:	Identification of wires and cables by computer-based printing onto sleeves. Sleeves can also provide terminal insulation, strain relief and mechanical protection. Suitable for a wide variety of applications, including aerospace, military and rail applications.		
Print Method/Ribbon:	See document 411-121005 – "Customer printer ribbon matrix", for current recommended printer / ribbon systems.		
	Sleeves may also be laser marked using the LMS 9000 ¹		
	¹ Contact a TE Sales Engineer for further details		
Service Temperature:	-55°C to +135°C (-67°F to +275°F).		
Maximum Storage	40°C (104°F).		
Temperature:			
Minimum Recovery Temperature:	120°C (248°F)		
Colors:	White and Yellow.		
Shelf Life	Storage life (pre-installation) shall be in compliance with AMS SAE 23053/5.		
	5 years when stored between 18°C to 35°C (64°F to 95°F).		
Specifications /	UL recognised standard 224 (File E35586).		
Approvals:	CSA certified (File LR31929).		
	AMS SAE 23053/5 Class 1		
	NFF 00608 Cat A		
	SAE AS 5942 Mark Adherence		
	MIL 202F Method 215 Resistance to Solvents		

Author: L Smith / A F Kean Issue date: Dec' 2011 Page: 1 of 3

While TE Connectivity has made every reasonable effort to ensure the accuracy of the information in this datasheet, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this document are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.



TECHNICAL DATA SHEET

TMS-90-SCE

Document number: TTDS-212

Issue: 1

Date: December 2011

HEAT SHRINK MARKER SLEEVE

PERFORMANCE:

Physical Properties

Tensile Strength: 10.3MPa minimum (SAE-AMS-DTL-23053/5).

Ultimate Elongation: 200% minimum (SAE-AMS-DTL-23053/5).

2% Secant Modulus: 172.4MPa maximum (SAE-AMS-DTL-23053/5).

Longitudinal Change: ±5% (SAE-AMS-DTL-23053/5).

Thermal Properties

Heat Ageing: 100% UE retained and print legible after 336 hours at 175 °C (347 °F).

Heat Shock: No cracking, dripping or flowing and print legible after 4 hours at 250°C (482°F).

Low Temperature Flexibility: No cracking after 4 hours at -55°C (-67°F), followed by mandrel bend.

Other Properties

Resistance To Fungus: ISO EN 846 Method B: 56 days exposure.

No change in mechanical and electrical properties. Print legible.

Flammability: UL224 (C22.2 No. 198.1-99) Flame Test – All Tubing

FED STAN 228 method 5221

ASTM D876

Burn time 30 seconds maximum.

No flag burn; no burning of cotton or dripping.

Water Absorption: 0.5% maximum (ASTM D570), 24hours at 23°C.

Dielectric Strength: 19.7MV/m minimum (ASTM D2671).

Author: L Smith / A F Kean Issue date: Dec' 2011

Page: 2 of 3

While TE Connectivity has made every reasonable effort to ensure the accuracy of the information in this datasheet, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this document are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.



TECHNICAL DATA SHEET

TMS-90-SCE

Document number: TTDS-212

Issue: 1

Date: December 2011

HEAT SHRINK MARKER SLEEVE

FLUID RESISTANCE:

Sleeve properties after 24 hour immersion at 23°C. Samples tested 30 minutes after removal from the fluid in accordance with SAE AMS 23053/5, Class 1.

Printed samples rubbed with eraser in accordance with SAE AS 81531.

THREAT	TEST	TYPICAL RESULT	LEGIBILITY	
Hydraulic Fluid	Tensile Strength (MPa)	11		
(MIL PRF 5606)	Dielectric Strength (kV/mm)	63	Pass	
Military Jet Fuel JP-8	Tensile Strength (MPa)	11	Pass	
(MIL-DTL-83133)	Dielectric Strength (kV/mm)	67		
Rocket Propellant JP-10	Tensile Strength (MPa)	10	Pass	
(MIL-P-87107)	Dielectric Strength (kV/mm)	40		
Synthetic Lubricating Oil,	Tensile Strength (MPa)	14	Pass	
Turbo prop and turbo jet aircraft gas turbines (MIL PRF 7808)	Dielectric Strength (kV/mm)	53		
Synthetic Lubricating Oil,	Tensile Strength (MPa)	15	Pass	
Civil and military aircraft gas turbines (MIL PRF 23699)	Dielectric Strength (kV/mm)	56		
5 % NaCl	Tensile Strength (MPa)	16	Pass	
(A-A-694)	Dielectric Strength (kV/mm)	60		
De-icing Fluid	Tensile Strength (MPa)	15	Pass	
(SAE AS 8243)	Dielectric Strength (kV/mm)	52		
Synthetic Hydraulic Fluid	Tensile Strength (MPa)	15	Pass	
Military aircraft, Fire Resistant, Hydrocarbon Base, Aircraft (MIL-PRF-83282)	Dielectric Strength (kV/mm)	53		

For full product performance details see TE Connectivity specification RW-2530

Some types of neoprene insulation used in jackets contain additives that can migrate to the surface and discolor the polyolefin TMS-90-SCE sleeves. Any discoloration is dependent on the composition of the neoprene, combined with application conditions. Users should independently evaluate the suitability of TMS-90-SCE sleeves for applications involving neoprene-jacketed cables.

Author: L Smith / A F Kean Issue date: Dec' 2011 Page: 3 of 3

While TE Connectivity has made every reasonable effort to ensure the accuracy of the information in this datasheet, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this document are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

ПОСТАВКА ЭЛЕКТРОННЫХ КОМПОНЕНТОВ

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001 Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г. Москва, ул. Щербаковская д. 3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru moschip.ru_6 moschip.ru_4 moschip.ru_9