



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# TECHNICAL DATA SHEET

Document number: TTDS-134  
Issue: 3  
Date: September 2013

## HLX-NEL (NARROW EDGE LEADING) LFH CABLE MARKERS

### DESCRIPTION:

Low Fire Hazard, UV stabilised, cross-linked polyolefine Cable Markers, assembled in a Narrow Edge Leading (NEL) format. Consisting of a continuous strip formed into punched tie on Cable Markers. Cable Markers have perforated edges for easy removal

### USE:

Designed for identification of larger cables and wire bundles where the volume or complexity of the wiring system is relatively low. Markers are printed by a computer-based system and are attached using cable ties. Ideal for applications where low fire hazard characteristics (low smoke, low toxicity and low flammability) are critical

### COLORS:

White or Yellow

### SERVICE TEMPERATURE:

-40°C to +105°C (-40°F to +221°F)

### SPECIFICATIONS AND APPROVALS:

TE CONNECTIVITY	RW-2529 (Qualification Standard) TTDS-134 (Technical Data Sheet)
MILITARY	SAE AS5942 3.4.1. (Adherence) MIL-STD-202 Method 215 (Resistance to Solvents)
INDUSTRY	London Underground Standard 1-085 A3 Fire Safety Performance of Materials: Limited, dispersed usage EN45545-2 Requirements for fire behaviour of materials and components: Hazard rating 3 (R24) BS 6853 (1999): Vehicle category 1a NF F 16-101 Railway rolling stock, fire behaviour, choice of materials: Classification A1 SAE AS5942 3.4.1. Adherence

### PRINTING SYSTEM:

Refer to TE Connectivity Document 'Printer Product Ribbon Matrix 411-121005

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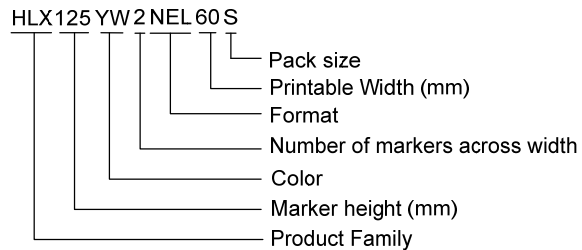


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**PART NUMBER  
 DESCRIPTION:**



Refer to RW-2529 for available sizes and formats

Property	Unit	Test Method	Result
<b>1. Physical</b>			
TENSILE STRENGTH	MPa	ASTM D2671	7 Minimum
<b>2. Fire Safety</b>			
OXYGEN INDEX	%	BS EN ISO 4589-2: 1996	34 Minimum
SMOKE EMISSION, A0	---	BS6853:1999 Annex D.8.3.	0.017 Maximum
TOXIC FUME, R	---	NF X 70-100 Mass Based test Method	<1
LUL TOXIC FUME	---	1-085 A3 Fire Safety Performance of Materials	No Halogens, Phosphorus, Sulphur, or Nitrogen above trace level

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Property	Unit	Test Method	Result
<b>3. Environmental</b>			
MOULD GROWTH	---	BS EN 60068-2-10	Rating 2 Maximum
COLOR FASTNESS	---	BS 2782: Part 5: Method 540B using a Xenon arc discharge lamp	No colour change, legible
UV RESISTANCE			
• Tensile Strength	MPa	>90% of Original	Pass
• Ultimate Elongation	%	>40% of Original	Pass
<b>4. Print Permanence</b>			
PRINT ADHERENCE, DRY RUB	---	SAE AS 5942, 20 rubs, 4Kg load	Legible, Pass
HEAT AGEING	---	175°C, 168 hours followed by SAE AS 5942, 20 rubs, 4Kg load	Legible, Pass
HEAT SHOCK	---	225°C, 4 hours followed by SAE AS 5942, 20 rubs, 4Kg load	Legible, Pass
RESISTANCE TO FLUIDS			
• Aircraft Fuel (ISO 1817 Liquid B)	---	40°C, 24 hours, 25 wipes	Legible, Pass
• Hydraulic Fluid (NATO H520)	---	50°C, 24 hours, 25 wipes	Legible, Pass
• Phosphate Ester (ISO 1817 fluid 103)	---	70°C, 24 hours, 25 wipes	Legible, Pass
• Silicone Hydraulic fluid (NATO S1714)	---	50°C, 24 hours, 25 wipes	Legible, Pass
• De-Icing Fluid (Iso Propyl Alcohol)	---	40°C, 24 hours, 25 wipes	Legible, Pass

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