



# PRODUCT SPECIFICATION

## PRODUCT SPECIFICATION OF THE 0.50MM CENTER FFC JUMPER CABLE (HIGH TEMPERATURE)

### *Revision List*

REVISION	MODIFICATION	SHEETS	DATE
A	First Release	1 - 5	2010/09/27
B	Updated Specification	1 - 5	2011/09/29
C	Modified Specification (Sections 2.2, 2.3, 4.1, 6, 7)	1 - 5	2014/05/07

REVISION: <b>C</b>	ECR/ECN INFORMATION: EC No: <b>USW2014-0256</b> DATE: <b>2014/05/07</b>	TITLE: <b>PRODUCT SPECIFICATION 0.50MM CENTER FFC JUMPER CABLE (HIGH TEMPERATURE)</b>	SHEET No. <b>1 of 5</b>
DOCUMENT NUMBER: <b>PS-15266-001</b>	CREATED / REVISED BY: <b>M.IMIG</b>	CHECKED BY: <b>D.ENGLISH</b>	APPROVED BY: <b>S.FULTON</b>



# PRODUCT SPECIFICATION

## 1 SCOPE

This specification covers the 0.50mm center FFC (Flat Flexible Cable) jumper cable, high temperature style, using tin plated copper conductor.

## 2 PRODUCT DESCRIPTION

### 2.1 Product name and series number

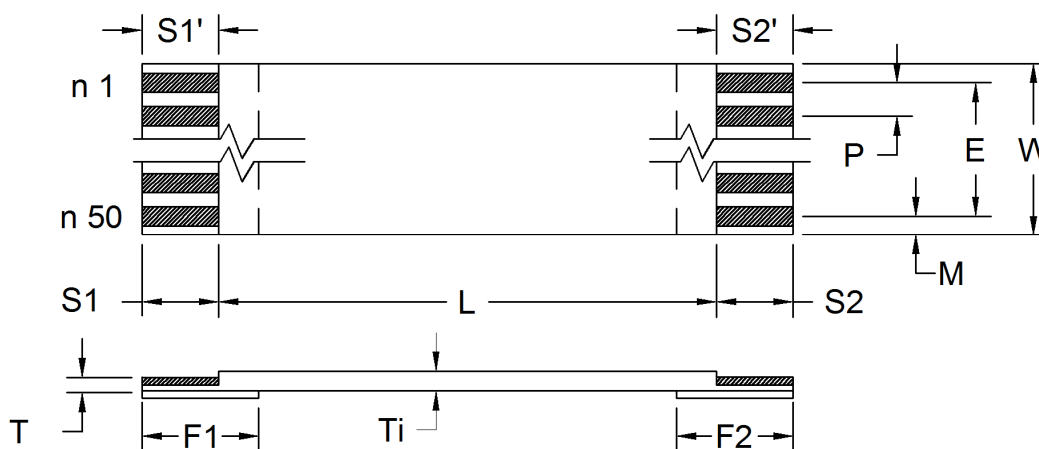
Product name: 0.50MM CENTER FFC JUMPER CABLE (HIGH TEMP)

Product material no: 15266-XXXX

### 2.2 Dimensions, materials and markings

Product dimensions according SD-15266-001.

- Number of conductors ..... N: 6 to 50
- Pitch ..... P:  $0.50 \pm 0.05$ mm
- Span ..... E:  $0.50 (N-1) \pm 0.10$ mm
- Total width ..... W:  $0.50 (N+1) \pm 0.10$ mm
- Margin width ..... M:  $0.5 + 0.15 / - 0.096$ mm
- Strip length ..... S:  $4.00 \pm 0.80$ mm
- End thickness of the connection area ... Tc:  $0.30 \pm 0.05$ mm
- Thickness of the insulated area ..... Ti:  $0.27 \pm 0.05$ mm
- Insulated length ..... L: 20 to 60mm  $\pm 2.00$ mm  
61 to 100mm  $\pm 3.00$ mm  
101 to 200mm  $\pm 4.00$ mm  
201 to 3999mm  $\pm 5.00$ mm  
4000 to 5999mm  $\pm 10.00$ mm  
6000 to 9999mm  $\pm 15.00$ mm
- Reinforcement length ..... F:  $8.00 \pm 2.00$ mm
- End squareness ..... s-s': 0.30mm max.



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## 2.3 COMPOSITION

- Conductor:                   Material: Tin plated copper conductor  
                                   Thickness: 0.10mm nominal (Standard)
- Insulation tape:           Material: Polyester + Flame retardant adhesive  
                                   Thickness: 0.086mm nominal  
                                   Color: white
- Reinforcement tape:Material: Polyester + Adhesive  
                                   Thickness: 0.15mm nominal  
                                   Color: Blue

## 2.4 Safety agency approvals

Not applicable.

## 3 RATINGS

### 3.1 Current and applicable conductors

Cross section	Amps
0.03mm <sup>2</sup>	0.5

### 3.2 Temperature

Operating temperature:                   -40°C to +105°C

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## 4 PERFORMANCE

### 4.1 Electrical requirements

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Conductor resistance	ASTM B 193	730 ohms/km MAXIMUM
2	Insulation resistance cond. to cond.	200 V DC	10 Mohms/km MINIMUM
3	Dielectric test	200 V AC for 1 minute	No disruptive discharge
4	Continuity test	3.0 V DC at 0.1mA	passed
5	Voltage rating		60 V AC MAXIMUM
6	Current rating	at 23°C increase in 10°C at the surface (all conductors under load)	0.5 A MIN

### 4.2 Physical requirements

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
7	Temperature rating		-40°C to +105°C
8	Heat resistance	168 hours at 136°C	Insulation resistance Dielectric test
9	Thermal shock	30 minutes at -55°C 5 minutes at +25°C 30 minutes at +85°C 5 minutes at +25°C	Insulation resistance after 25 cycles
10	Cold coiling	96 hours at -40°C / The sample will be wound on a 3mm dia. Mandrel	Insulation resistance Dielectric test Visual inspection
11	Wear by abrasion	Test following EN3475-503 Weight: 500g Speed: 60 cycles/min Abrasion tool: 0.13mm dia.	10000 cycles (standard) 1000 cycles (shielded) MINIMUM
12	Folding	The specimen shall be folded manually (Bending angle: 180° / Radius: 4mm)	20 times MINIMUM
13	Moisture resistance	96 hours at 60°C, 95% RH	Insulation resistance Dielectric test
14	Flame resistance	UL 758 VW-1	Passed
15	Solderability	Immersion of the area which is intended for soldering into a tin bath at 250 ± 10°C During 30 seconds	No delamination Solder reflow below 1 mm

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## 5 PACKAGING

According to MOLEX packaging specification: PK-15266-001

## 6 UL APPROVAL

Materials used and construction of cable are UL compliant under UL style 20706

Temperature rating: 105°C

Voltage rating: 60 V AC

## 7 ROHS COMPLIANCE

Cable construction is RoHS compliant.

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