PRODUCT SPECIFICATION

PRODUCT SPECIFICATION OF THE 1,00MM CENTER FFC JUMPER CABLE (HIGH TEMPERATURE)

Revision List

REVISION	MODIFICATION	SHEETS	DATE
A	First Release	1 - 5	2004/07/05
B	Updated Specification	1 - 4	2011/09/29

1 SCOPE

This specification covers the 1,00mm center FFC (Flat Flexible Cable) jumper cable, high temperature style, using tin plated copper conductor.

2 PRODUCT DESCRIPTION

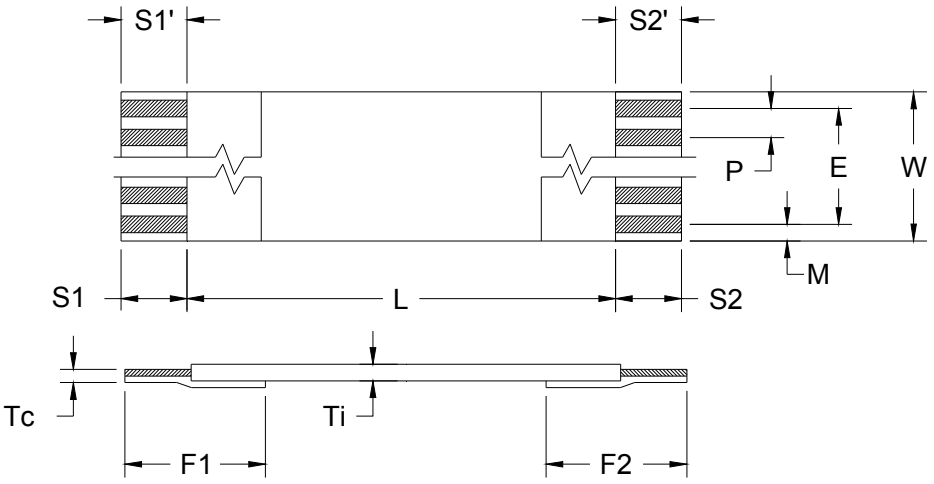
2.1 Product name and series number

Product name: 1,00MM CENTER FFC JUMPER CABLE (HIGH TEMPERATURE)
Product material no: 98267-XXXX

2.2 Dimensions, materials and markings

Product dimensions according SD-98267-001.

Number of conductors ····· N: 4 to 99
Pitch ····· P: 1,00 ± 0,08mm
Span ····· E: 1,00 (N-I) ± 0,15mm
Total width ····· W: 1,00 (N+I) ±0,10
Margin width ····· M: 1,00 ± 0,20mm
Strip length ····· S: 4,00 ± 1,00mm
End thickness of the Connection area ·· Tc: 0,30 ± 0,03mm
Thickness of the Insulated area ····· Ti: 0,22 ± 0,05mm
Insulated length ····· L: 30 to 60mm ± 2,00mm
61 to 102mm ± 3,00mm
103 to 203mm ± 4,00mm
204 to 999mm ± 5,00mm
Reinforcement length ····· F: 8,00 ± 2,00mm
End scariness ····· s-s': 0,40mm max.



2.3 Composition

- FFC tape: Material: Polyester + Flame retardant adhesive
  Thickness: 0,070mm reference
  Color: white
- Reinforcement tape: Material: Polyester + Adhesive
  Thickness: 0,201mm reference
- FFC conductor: Material: Tin plated copper
  Width: 0,70mm
  Thickness: 0,10mm
  Plating: tin min. 1µm

2.4 Safety agency approvals

Not applicable.

3 Ratings

3.1 Current and applicable conductors

Cross section	Amps
0,07mm²	1,2

3.2 Temperature

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

4 PERFORMANCE

4.1 Electrical requirements

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	**Conductor resistance**	ASTM B 193	310 ohms/km MAXIMUM
2	**Insulation resistance cond. to cond.**	500 V DC	10 Mohms/km MINIMUM
3	**Dielectric test**	400 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)	1,2 A MINIMUM

4.2 Physical requirements

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
7	**Temperature rating**		-40°C to +105°C
8	**Heat resistance**	168 hours at 135°C	Insulation resistance Dielelectric test
9	**Thermal shock**	30 minutes at –55°C 5 minutes at +25°C 30 minutes at +105°C 5 minutes at +25°C	Insulation resistance after 25 cycles
10	**Cold coiling**	4 hours at –40°C / The sample will be wound on a 3mm dia. Mandrel	Insulation resistance
11	**Wear by abrasion**	Test following DIN ISO 6722-1 Weight: 500g Speed: 60 cycles/min Abrasion tool: 0,50mm	10000 cycles MINIMUM
12	**Folding**	The specimen shall be folded manually (Bending angle: 180° / Radius: 4mm)	5 times MINIMUM
13	**Moisture resistance**	96 hours at 60°C, 95% RH	Insulation resistance

4.3 Mechanical properties

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
14	**Insulation elongation**	JIS C 2318	60 % MINIMUM
15	**Tensile strength**	JIS C 2318	32 N/mm² MINIMUM

5 PACKAGING

According to MOLEX packaging specification: PK-98267-001