

**PRODUCT FAMILY SPECIFICATION FOR
1.00 mm PITCH FLAT FLEX CABLE (FFC)
(105°C, Sn PLATED)*****Revision List***

REVISION	MODIFICATION	DATE
A	First release	2010/09/27
B	Updated specification	2011/09/29
C	Modified specification (Sections 2.2, 2.3, 4.1, 6, 7)	2014/05/07
D	Format update	2022/08/18
E	Number of conductors updated	2022/12/08
F	Flex life cycles update	2023/12/06

REVISION: F	INFORMATION: STATUS: RELEASED DATE: 2023/12/06	TITLE: PRODUCT FAMILY SPECIFICATION FOR 1.00 mm PITCH FLAT FLEX CABLE (FFC) (105°C, Sn PLATED)	SHEET No. 1 of 5	
DOCUMENT NUMBER: PS-15267-001		CREATED / REVISED BY: D. GOMEZ	CHECKED BY: M. IMIG	APPROVED BY: J. SMITH

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

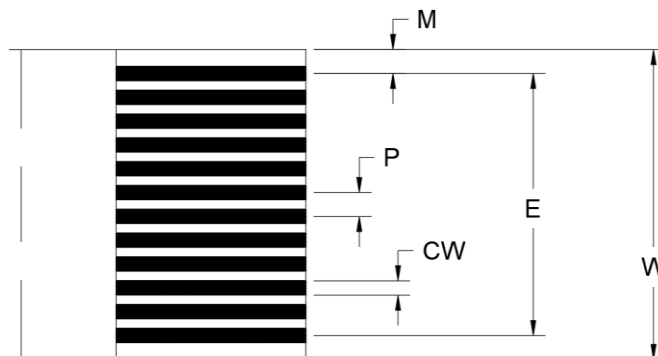
2.1 Product name and series number

Product name: 1.00MM CENTER FFC JUMPER CABLE (105°C, Sn PLATED)
 Product material no: 15267-XXXX

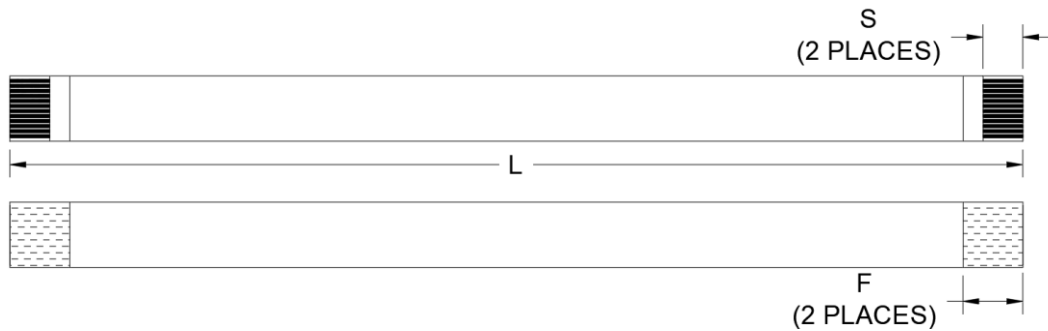
2.2 Dimensions, materials, and markings

Product dimensions (in mm) according to SD-15267-001.

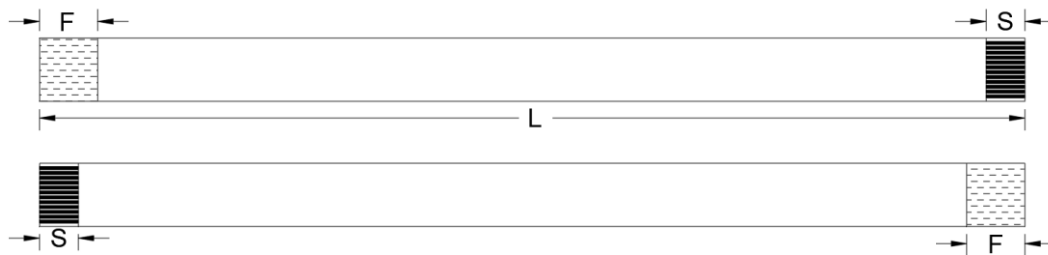
Number of conductors	N	Refer to sales drawing
Pitch	P	1.00 ± 0.08
Span	E	1.00 (N-1) ± 0.15
Total width	W	1.00 (N+1) ± 0.10
Conductor width	CW	0.7 ± 0.03
Margin width	M	1.0 ± 0.20
Strip length	S	4.0 ± 0.80
End thickness of the Connection area	Tc	0.30 ± 0.05
End thickness of the insulated area	Ti	0.27 ± 0.05
Insulated length	L	20 to 60 ± 2.00 61 to 100 ± 3.00 101 to 200 ± 4.00 201 to 3999 ± 5.00 4000 to 5999 ± 10.00 6000 to 9999 ± 15.00
Reinforcement length	F	8.00 ± 2.00
End squareness	s-s'	0.40 max.



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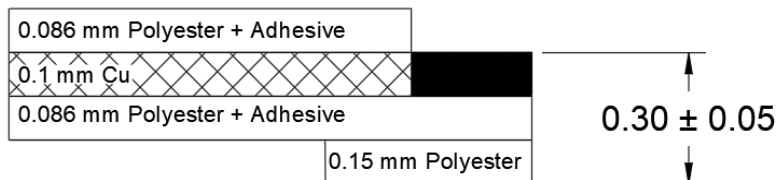
Type A (Contacts on the same side)



Type D (Contacts on the opposite side)

2.3 Composition

- Conductor:**
 - Material: Copper
 - Thickness: 0.10mm nominal
 - Plating: 0.4µm Sn min
- Insulation tape:**
 - Material: Polyester + Flame retardant adhesive
 - Thickness: 0.086mm nominal
 - Color: White
- Reinforcement tape:**
 - Material: Polyester + Adhesive
 - Thickness: 0.15mm nominal



2.4 Current and applicable conductors

Conductor Width	Conductor Thickness	Cross section	Current
0.7 mm	0.1 mm	0.07mm ²	1.25 A


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3 ELECTRICAL AND PHYSICAL SPECIFICATION

3.1 Electrical requirements

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Conductor resistance	---	300 ohms/km MAXIMUM
2	Insulation resistance cond. to cond.	400 V DC	10 Mohms.m 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	1.25 A (all conductors under load) at 23°C	Maximum 30°C heat rise
7	Impedance cond/cond balanced method	FFC at 1 MHz	120 Ω TYP
8	Capacitance cond/cond balanced method	FFC at 1 KHz	50 pF/m

3.2 Physical requirements

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
9	Temperature rating		-40°C to +105°C
10	Heat resistance	168 hours at 136°C	Insulation resistance Dielectric test
11	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
12	Cold coiling	96 hours at -40°C / The sample will be wound on a 3mm dia. Mandrel	Insulation resistance Dielectric test Visual inspection
13	Wear by abrasion	Test following EN3475-503 Weight: 500g Speed: 60 cycles/min Abrasion tool: 0.13mm dia.	10,000 cycles MINIMUM
14	Folding	The specimen shall be folded manually at 180°	Continuity after 20 times
15	Flex Lifecycles	Speed: 100 cycles/min R: 10 mm Temp: 23°C 	50,000 cycles MINIMUM

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16	Moisture resistance	96 hours at 60°C, 95% RH	Insulation resistance Dielectric test
17	Flame resistance	UL 758 VW-1	Passed
18	Solderability	Immersion of the area which is intended for soldering into a tin bath at 250 ± 10°C for 30 seconds	No delamination Solder reflow below 1 mm

4 UL APPROVAL

Materials used and construction of cable are UL compliant under UL style 20706
 Temperature rating: 105°C
 Voltage rating: 60 V AC

5 ROHS COMPLIANCE

Cable construction is RoHS compliant.

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