

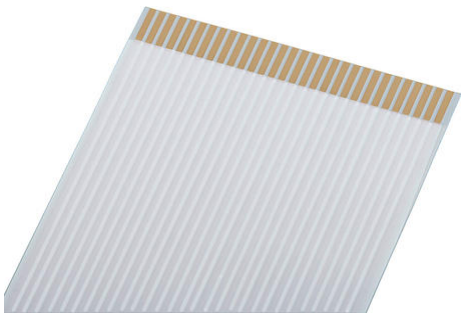
Accumulator Scrutineering

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Part Number : [150390359](#)
Product Description : 1.00mm Pitch Premo-Flex FFC
Jumper, Same Side Contacts (Type A), 76.00mm Cable
Length, Gold (Au) Plating, 20 Circuits
Series Number : 15039
Status : Active
Product Category : Flat-Flexible Cable (FFC)



Documents & Resources

Drawings
[150390359 sd.pdf](#)
Specifications
[PS-15039-001-001.pdf](#)

Product Environment Compliance..

Compliance

GADSL/IMDS	Not Relevant
China RoHS	 per SJ/T 11365-2006
EU ELV	Not Relevant
Low-Halogen Status	Not Low-Halogen per IEC 61249-2-21
REACH SVHC	Not Contained per D(2023)8585-DC (23 Jan 2024)
EU RoHS	Compliant per EU 2015/863

Compliance Statements

- EU RoHS
- REACH SVHC
- Low-Halogen

Industry Documents

- IPC 1752A Class C
- IPC 1752A Class D
- Molex Product Compliance Declaration
- IEC-62474

- chemSHERPA (xml)

Substances of Interest

- PFAS

EU RoHS Certificate of Compliance

Additional Product Compliance Information

Part Details

General

Status	Active
Category	Flat-Flexible Cable (FFC)
Series	15039
Description	1.00mm Pitch Premo-Flex FFC Jumper, Same Side Contacts (Type A), 76.00mm Cable Length, Gold (Au) Plating, 20 Circuits
Comments	Contacts on the same side, Type A
Product Name	Premo-Flex FFC Jumper
UPC	193264175376

Electrical

Current - Maximum per Contact	1.2A
Voltage - Maximum	60V AC

Physical

Cable Length	76.00mm
Circuits (Loaded)	20
Contact Layout Type	A (same side)
Design Feature	Flexible
Material - Plating Mating	Gold
Packaging Type	Bag
Pitch - Mating Interface	1.00mm
Temperature Range - Operating	-40° to +105°C
Termination Style	FFC Connector
Wire/Cable Type	Flat Flex Cable
Wire Size (AWG)	N/A

1 SCOPE

This specification covers the 1.00mm center FFC (Flat Flexible Cable) jumper cable, 105°C, using gold plated copper conductor.

2 PRODUCT DESCRIPTION

2.1 Product name and series number

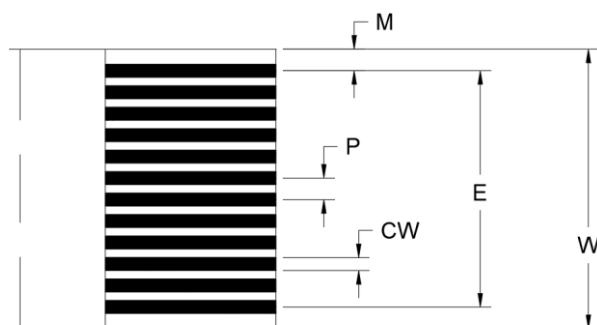
Product name: 1.00MM PITCH FFC JUMPER CABLE (105°C, Au PLATING)

Product material no: 15039-XXXX

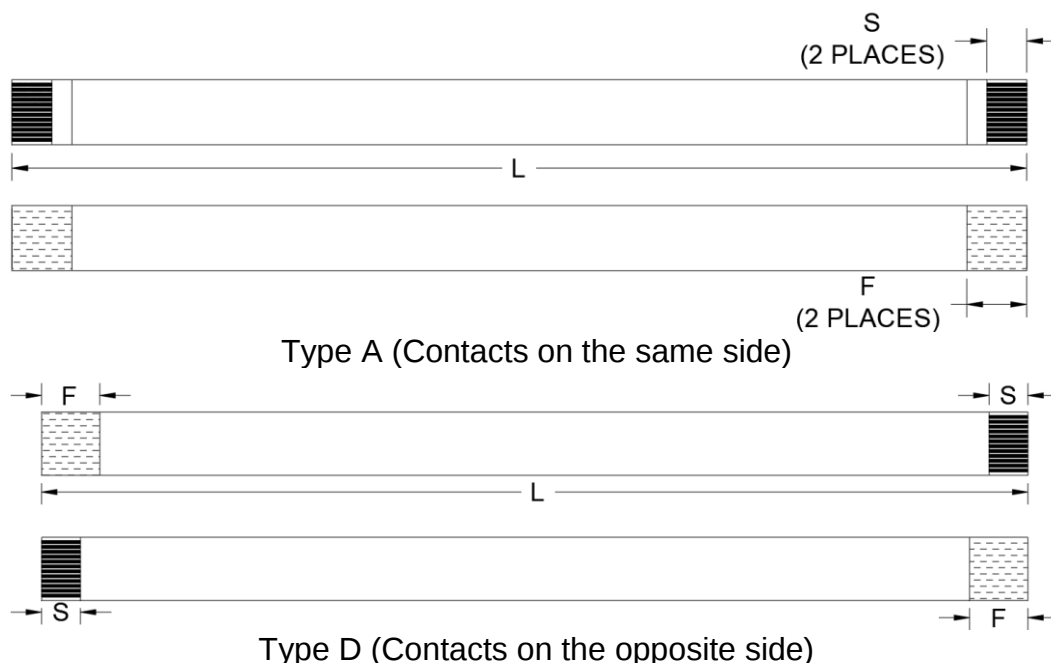
2.2 Dimensions, materials, and markings

Product dimensions (in mm) according to SD-15039-001.

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	0.70 ± 0.03
Margin width	M	1.0 ± 0.20
Strip length	S	4.00 ± 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.

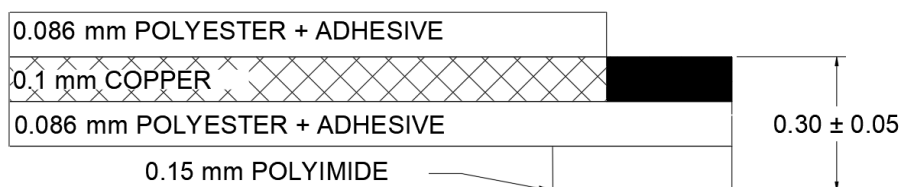


REVISION: E	ECR/ECN INFORMATION: STATUS: RELEASED DATE: 2023/12/06	TITLE: PRODUCT FAMILY SPECIFICATION FOR 1.00 mm PITCH FLAT FLEX CABLE (FFC) (105°C, Au PLATING)	SHEET No. 2 of 5
DOCUMENT NUMBER: PS-15039-001	CREATED / REVISED BY: D. GOMEZ	CHECKED BY: M. IMIG	APPROVED BY: J.SMITH



2.3 COMPOSITION

- Conductor:**
 - Material: Copper
 - Thickness: 0.10 mm nominal
 - Plating: 0.3 μ m Ni min & 0.05 μ m Au min.
- Insulation tape:**
 - Material: Polyester + Flame retardant adhesive
 - Thickness: 0.086 mm typical
 - Color: White
- Reinforcement tape:**
 - Material: Polyester + Adhesive
 - Thickness: 0.155 mm 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

REVISION: E	ECR/ECN INFORMATION: RELEASED DATE: 2023/12/06	TITLE: PRODUCT FAMILY SPECIFICATION FOR 1.00 mm PITCH FLAT FLEX CABLE (FFC) (105°C, Au PLATING)	SHEET No. 3 of 5
DOCUMENT NUMBER: PS-15039-001	CREATED / REVISED BY: D. GOMEZ	CHECKED BY: M. IMIG	APPROVED BY: J.SMITH

3 ELECTRICAL AND PHYSICAL SPECIFICATION

3.1 Electrical requirements

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Conductor resistance	ASTM B 193	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	40°C heat rise MAX
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 MIN
16	Moisture resistance	96 hours at 60°C, 95% RH	Insulation resistance Dielectric test
17	Flame resistance	UL 758 VW-1	Passed

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
E	STATUS: RELEASED DATE: 2023/12/06	PRODUCT FAMILY SPECIFICATION FOR 1.00 mm PITCH FLAT FLEX CABLE (FFC) (105°C, Au PLATING)	4 of 5
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
PS-15039-001	D. GOMEZ	M. IMIG	J.SMITH



Part Number : [2043130006](#)
Product Description : Sentrality 6.00mm Top-entry,
Knurled Press-fit Socket Assembly with +/-1.00mm
Self-alignment Capability, Tray
Series Number : 204313
Status : Active
Product Category : PCB Headers and Receptacles



Documents & Resources

Drawings

[2043130006_sd.pdf](#)
[2043650006-PK-000.pdf](#)

3D Models and Design Files

[2043130006_stp.zip](#)

Specifications

[2043130006-PS-000.pdf](#)
[2043130006-TS-000.pdf](#)
[2043131234-TS-000.pdf](#)

Product Environment Compliance..

Compliance

GADSL/IMDS	Not Relevant
China RoHS	 per SJ/T 11365-2006
EU ELV	Not Relevant
Low-Halogen Status	Low-Halogen per IEC 61249-2-21
REACH SVHC	Not Contained per D(2024)4144-DC (27 June 2024)
EU RoHS	Compliant per EU 2015/863

Compliance Statements

- EU RoHS
- REACH SVHC

- Low-Halogen

Industry Documents

- IPC 1752A Class C
- IPC 1752A Class D
- Molex Product Compliance Declaration
- IEC-62474
- chemSHERPA (xml)

Substances of Interest

- PFAS

EU RoHS Certificate of Compliance

Additional Product Compliance Information

Part Details

General

Status	Active
Category	PCB Headers and Receptacles
Series	204313
Description	Sentrality 6.00mm Top-entry, Knurled Press-fit Socket Assembly with +/-1.00mm Self-alignment Capability, Tray
Application	Busbar-to-Board, Busbar-to-Busbar, Power
Comments	Current and voltage performances are dependent upon application variables.
Component Type	PCB Receptacle
Product Name	Sentrality
UPC	191130149902

Electrical

Current - Maximum per Contact	140.0A
Voltage - Maximum	600V

Physical

Breakaway	No
Circuits (Loaded)	1

Circuits (maximum)	1
Diameter	6.00mm
Durability (mating cycles max)	200
Glow-Wire Capable	No
Guide to Mating Part	Yes
Height Above Board	3.40mm
Material - Metal	Copper Alloy
Material - Plating Mating	Gold
Material - Plating Termination	Silver
Mating Orientation	Top-entry
Net Weight	10.302/g
Number of Rows	1
Orientation	Vertical
Packaging Type	Tray
PCB Retention	None
Pitch - Mating Interface	N/A
Polarized to Mating Part	No
Polarized to PCB	No
Temperature Range - Operating	-40° to +125°C
Termination Interface Style	Press-Fit

Mates With / Use With

Mates with Part(s)

Description	Part Number
Sentrality Pins	<u>203263</u>



Part Number : [2032630026](#)
Product Description : Sentrality 6.00mm Knurled Press-fit Pin, 14.00mm Engagement Length, Bag
Series Number : 203263
Status : Active
Product Category : PCB Headers and Receptacles



Documents & Resources

Drawings

[2032630026_sd.pdf](#)
[2032630006-PK-000.pdf](#)

3D Models and Design Files

[2032630026_stp.zip](#)

Specifications

[2043130018-AS-000.pdf](#)
[2043130006-PS-000.pdf](#)
[2043131234-TS-000.pdf](#)

Product Environment Compliance..

Compliance

GADSL/IMDS	Not Relevant
China RoHS	 per SJ/T 11365-2006
EU ELV	Not saleable
Low-Halogen Status	Low-Halogen per IEC 61249-2-21
REACH SVHC	Not Contained per D(2024)7663-DC (21 Jan 2025)
EU RoHS	Compliant per EU 2015/863

Compliance Statements

- EU RoHS
- REACH SVHC
- Low-Halogen

Industry Documents

- IPC 1752A Class C
- IPC 1752A Class D
- Molex Product Compliance Declaration
- IEC-62474
- chemSHERPA (xml)

Substances of Interest

- PFAS

EU RoHS Certificate of Compliance

Additional Product Compliance Information

Part Details

General

Status	Active
Category	PCB Headers and Receptacles
Series	203263
Description	Sentrality 6.00mm Knurled Press-fit Pin, 14.00mm Engagement Length, Bag
Application	Board-to-Board, Busbar-to-Board, Busbar-to-Busbar, Power
Component Type	PCB Header
Product Name	Sentrality
UPC	193264044658

Electrical

Current - Maximum per Contact	140.0A
Voltage - Maximum	600V

Physical

Breakaway	No
Circuits (Loaded)	1
Circuits (maximum)	1
Diameter	6.00mm
Durability (mating cycles max)	200
Glow-Wire Capable	No
Guide to Mating Part	No

Height Above Board	14.00mm
Material - Metal	Copper Alloy
Material - Plating Mating	Silver
Material - Plating Termination	Silver
Net Weight	4.464/g
Number of Rows	1
Orientation	Vertical
Packaging Type	Bag
PCB Retention	None
Pitch - Mating Interface	N/A
Polarized to Mating Part	No
Polarized to PCB	No
Temperature Range - Operating	-40° to +125°C
Termination Interface Style	Press-Fit

Mates With / Use With

Mates with Part(s)

Description	Part Number
Sentrality Top-entry Surface Mount Socket Assemblies	<u>204318</u>
Sentrality Top-entry Surface Mount Socket Assemblies with Self-alignment Capability	<u>204365</u>
Sentrality Top-entry Knurled Press-Fit Socket Assemblies with Self-alignment Capability	<u>204313</u>
Sentrality Top-entry Knurled Press-Fit Socket Assemblies	<u>204316</u>
Sentrality 3.40mm Right-Angle Socket Assemblies	<u>205000</u>



Part Number : [2032630006](#)
Product Description : Sentrality 6.00mm Knurled Press-fit Pin, 26.00mm Engagement Length, Bag
Series Number : 203263
Status : Active
Product Category : PCB Headers and Receptacles



Documents & Resources

Drawings

[2032630006_sd.pdf](#)
[2032630006-PK-000.pdf](#)

3D Models and Design Files

[2032630006_stp.zip](#)

Specifications

[2043130006-PS-000.pdf](#)

Product Environment Compliance..

Compliance

GADSL/IMDS	Not Relevant
China RoHS	 per SJ/T 11365-2006
EU ELV	Not Relevant
Low-Halogen Status	Low-Halogen per IEC 61249-2-21
REACH SVHC	Not Contained per D(2024)4144-DC (27 June 2024)
EU RoHS	Compliant per EU 2015/863

Compliance Statements

- EU RoHS
- REACH SVHC
- Low-Halogen

Industry Documents

- IPC 1752A Class C
- IPC 1752A Class D

- Molex Product Compliance Declaration
- IEC-62474
- chemSHERPA (xml)

Substances of Interest

- PFAS

EU RoHS Certificate of Compliance

Additional Product Compliance Information

Part Details

General

Status	Active
Category	PCB Headers and Receptacles
Series	203263
Description	Sentrality 6.00mm Knurled Press-fit Pin, 26.00mm Engagement Length, Bag
Application	Board-to-Board, Busbar-to-Board, Busbar-to-Busbar, Power
Component Type	PCB Header
Product Name	Sentrality
UPC	191130149858

Electrical

Current - Maximum per Contact	140.0A
Voltage - Maximum	600V

Physical

Breakaway	No
Circuits (Loaded)	1
Circuits (maximum)	1
Diameter	6.00mm
Durability (mating cycles max)	200
Glow-Wire Capable	No
Guide to Mating Part	No
Height Above Board	26.00mm
Material - Metal	Copper Alloy

Material - Plating Mating	Silver
Material - Plating Termination	Silver
Net Weight	7.527/g
Number of Rows	1
Orientation	Vertical
Packaging Type	Bag
PCB Retention	None
Pitch - Mating Interface	N/A
Polarized to Mating Part	No
Polarized to PCB	No
Temperature Range - Operating	-40° to +125°C
Termination Interface Style	Press-Fit

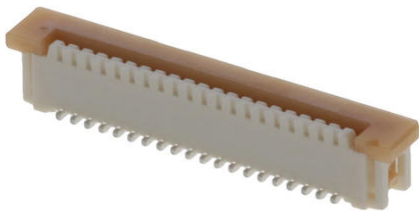
Mates With / Use With

Mates with Part(s)

Description	Part Number
Sentrality Top-entry Surface Mount Socket Assemblies	<u>204318</u>
Sentrality Top-entry Surface Mount Socket Assemblies with Self-alignment Capability	<u>204365</u>
Sentrality Top-entry Knurled Press-Fit Socket Assemblies with Self-alignment Capability	<u>204313</u>
Sentrality Top-entry Knurled Press-Fit Socket Assemblies	<u>204316</u>
Sentrality 3.40mm Right-Angle Socket Assemblies	<u>205000</u>



Part Number : [526102072](#)
Product Description : Easy-On FFC/FPC Connector,
1.00mm Pitch, Slider Series, Vertical, 5.75mm Height,
20 Circuits, Gold Plating
Series Number : 52610
Status : Active
Product Category : FFC / FPC Connectors



Documents & Resources

Drawings

[526102072_sd.pdf](#)

3D Models and Design Files

[526102072.dxf](#)

[526102072_stp.zip](#)

Specifications

[526100003-A00.pdf](#)

[SPK-52610-003-001.pdf](#)

[PS-52610-007-001.pdf](#)

Product Environment Compliance..

Compliance

GADSL/IMDS	Compliant with Exemption 44; 33
China RoHS	 per SJ/T 11365-2006
EU ELV	Not Relevant
Low-Halogen Status	Not Low-Halogen per IEC 61249-2-21
REACH SVHC	Not Contained per D(2024)6225-DC (07 Nov 2024)
EU RoHS	Compliant per EU 2015/863

Compliance Statements

- EU RoHS

- REACH SVHC
- Low-Halogen

Industry Documents

- IPC 1752A Class C
- IPC 1752A Class D
- Molex Product Compliance Declaration
- IEC-62474
- chemSHERPA (xml)

Substances of Interest

- PFAS

EU RoHS Certificate of Compliance

Additional Product Compliance Information

Part Details

General

Status	Active
Category	FFC / FPC Connectors
Series	Slider
Description	Easy-On FFC/FPC Connector, 1.00mm Pitch, Slider Series, Vertical, 5.75mm Height, 20 Circuits, Gold Plating
Product Name	Easy-On
UPC	822350243704

Agency

CSA	LR19980
UL	E29179

Electrical

Current - Maximum per Contact	1.0A
Voltage - Maximum	125V

Physical

Actuator Type	Slider
Circuits (Loaded)	20
Circuits (maximum)	20

Color - Resin	Natural
Contact Position	N/A
Durability (mating cycles max)	30
Flammability	94V-0
Mated Height	5.75mm
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	Nylon
Net Weight	929.900/mg
Orientation	Vertical
Packaging Type	Embossed Tape on Reel
PCB Locator	No
PCB Mounting	Surface Mount
PCB Retention	None
PC Tail Length	2.00mm
Pitch - Mating Interface	1.00mm
Pitch - Termination Interface	1.00mm
Polarized to PCB	No
Stackable	No
Temperature Range - Operating	-40° to +85°C
Wire/Cable Type	FFC/FPC

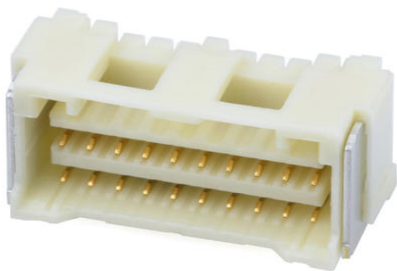
Mates With / Use With

Mates with Part(s)

Description	Part Number
1.00mm Pitch Premo-Flex FFC Jumpers	<u>15039</u>



Part Number : [2132282010](#)
Product Description : 1.50mm Pitch CLIK-Mate Wire-to-Board PCB Receptacle, Dual Row, Surface Mount, Right-Angle, 0.10µm Gold (Au) Plating, 20 Circuits, Natural
Series Number : 213228
Status : Active
Product Category : PCB Headers and Receptacles



Documents & Resources

Drawings

[2132282010 sd.pdf](#)

3D Models and Design Files

[2132282010.dxf](#)

[2132282010 stp.zip](#)

Specifications

[2132289200-SPK-200.pdf](#)

[5031491002-PS-000.pdf](#)

[5031490002-PS-000.pdf](#)

Product Environment Compliance..

Compliance

GADSL/IMDS	Compliant with Exemption 44; 34; 33
China RoHS	 per SJ/T 11365-2006
EU ELV	Not Relevant
Low-Halogen Status	Not Low-Halogen per IEC 61249-2-21
REACH SVHC	Not Contained per D(2024)6225-DC (07 Nov 2024)
EU RoHS	Compliant per EU 2015/863

Compliance Statements

- EU RoHS
- REACH SVHC
- Low-Halogen

Industry Documents

- IPC 1752A Class C
- IPC 1752A Class D
- Molex Product Compliance Declaration
- IEC-62474
- chemSHERPA (xml)

Substances of Interest

- PFAS

EU RoHS Certificate of Compliance

Additional Product Compliance Information

Part Details

General

Status	Active
Category	PCB Headers and Receptacles
Series	213228
Description	1.50mm Pitch CLIK-Mate Wire-to-Board PCB Receptacle, Dual Row, Surface Mount, Right-Angle, 0.10µm Gold (Au) Plating, 20 Circuits, Natural
Application	Signal, Wire-to-Board
Component Type	PCB Receptacle
Product Name	CLIK-Mate
UPC	193264244966

Agency

UL	E29179
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Electrical

Current - Maximum per Contact	2.0A
Voltage - Maximum	100V AC (RMS)/DC

Physical

Circuits (Loaded)	20
Circuits (maximum)	20
Color - Resin	Natural
Durability (mating cycles max)	30
Glow-Wire Capable	No
Guide to Mating Part	Yes
Keying to Mating Part	Yes
Lock to Mating Part	Yes
Material - Metal	Copper Alloy
Material - Plating Mating	Gold
Material - Resin	Polyamide
Number of Rows	2
Orientation	Right Angle
Packaging Type	Embossed Tape on Reel
PCB Locator	No
PCB Retention	Yes
Pitch - Mating Interface	1.50mm
Pitch - Termination Interface	1.50mm
Plating min - Mating	0.102µm
Plating min - Termination	0.102µm
Polarized to Mating Part	Yes
Polarized to PCB	No
Stackable	No
Temperature Range - Operating	-40° to +105°C
Termination Interface Style	Surface Mount

Mates With / Use With

Mates with Part(s)

Description	Part Number
1.50mm Pitch CLIK-Mate Dual Row Plug Housings	<u>503149</u>



NTC Thermistors, Mini Epoxy PVC Twin Insulated Leads



LINKS TO ADDITIONAL RESOURCES



QUICK REFERENCE DATA		
PARAMETER	VALUE	UNIT
Resistance value at 25 °C	4.7K to 100K	Ω
Tolerance on R_{25} -value	± 1.0 to ± 5.0	%
$B_{25/85}$ -value	3435 to 4190	K
Tolerance on $B_{25/85}$	± 0.5 to ± 1.5	%
Operating temperature range at zero dissipation	-40 to 105	°C
Maximum power dissipation at 55 °C	100	mW
Accuracy of temperature measurement (for 1 % types)	± 0.5 between 0 and 40 ± 1.0 between -40 and 80	°C
Dissipation factor δ (in still air)	≈ 3	mW/K
Response time (in oil)	≈ 2.5	s
Climatic category (LCT / UCT / days)	40 / 105 / 28	
Minimum dielectric withstanding voltage between leads and coated body	500	V _{RMS}
Weight (40 mm length)	0.2	g

FEATURES

- High adhesive strength between the PVC wire and the encapsulating lacquer
- Accurate down to ± 0.3 °C
- Small body of max. 3 mm for easy installation
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS COMPLIANT

APPLICATIONS

- Temperature measurement, sensing, and control
- On battery packs, heat-sinks, tubing, enclosures, etc.

DESCRIPTION

These sensors consist of small NTC chip soldered between stranded AWG #30, 105 °C resistant, PVC (UL2651). The conductors are overall tinned. They are lacquered and insulated with a black epoxy coating.

MARKING

Black lacquered body without additional mark

PACKAGING

SPQ: 125 items (for standard 40 mm lead wire length)

MOUNTING

Important mounting and handling instructions: see www.vishay.com/doc?29222

By soldering the wire end, or crimping connector. The body can be inserted in a tube, free in air, tape attached or glued. Not intended for fluid immersed applications or continuous contact with water. Not for potting in hard material or over-molding applications. Consult Vishay for specific application or mounting.

DESIGN-IN SUPPORT

- NTC curve computation: www.vishay.com/thermistors/ntc-rt-calculator/
- Other R/T curves available on request
- The lead length can be customized
- Connectors can be added to the wire end
- Consult Vishay for multistranded conductors for connector crimping

DIMENSIONS in millimeters	
Electronic components of assessed quality measured in accordance with IEC 60539-1	
Outline	NTCLE413E2
$\varnothing D$ max.	3.0
L	Refer to the "Electrical Data and Ordering Information" table
L_1 max.	10
L_2	3 ± 1
W	2 (for information)
$\varnothing d_1$	0.3 ± 0.03
$\varnothing d_2$	1 (for information)



Table 3

PART IDENTIFICATION	R_{25}		$B_{25/85}$	
	k Ω	$\pm$ %	K	$\pm$ %
NTCLE413 10K 1 % B3435 K	10	1	3435	1.0

RESISTANCE VALUES AT INTERMEDIATE TEMPERATURES							
TEMPERATURE (°C)	R_T (Ω)	R_T/R_{25}	R -TOL. ($\pm$ %)	α (%/K)	T-TOL. ($\pm$ °C)	$R_{MIN.}$ (Ω)	$R_{MAX.}$ (Ω)
-40.0	190 953	19.095	4.24	-5.46	0.78	182 848	199 057
-35.0	145 953	14.595	3.93	-5.30	0.74	140 213	151 693
-30.0	112 440	11.244	3.63	-5.14	0.71	108 354	116 526
-25.0	87 285	8.7285	3.35	-4.99	0.67	84 364	90 206
-20.0	68 260	6.8260	3.07	-4.85	0.63	66 164	70 355
-15.0	53 762	5.3762	2.80	-4.71	0.60	52 254	55 270
-10.0	42 636	4.2636	2.55	-4.57	0.56	41 549	43 723
-5.0	34 038	3.4038	2.30	-4.44	0.52	33 254	34 822
0.0	27 348	2.7348	2.07	-4.31	0.48	26 783	27 913
5.0	22 108	2.2108	1.84	-4.19	0.44	21 702	22 515
10.0	17 979	1.7979	1.62	-4.08	0.40	17 689	18 270
15.0	14 706	1.4706	1.40	-3.96	0.35	14 499	14 912
20.0	12 094	1.2094	1.20	-3.86	0.31	11 949	12 239
25.0	10 000	1.0000	1.00	-3.75	0.27	9900.0	10 100
30.0	8310.8	0.83108	1.19	-3.65	0.33	8211.7	8409.8
35.0	6941.1	0.69411	1.38	-3.55	0.39	6845.5	7036.7
40.0	5824.9	0.58249	1.56	-3.46	0.45	5734.1	5915.6
45.0	4910.6	0.49106	1.73	-3.37	0.51	4825.6	4995.7
50.0	4158.3	0.41583	1.90	-3.28	0.58	4079.2	4237.3
55.0	3536.2	0.35362	2.06	-3.20	0.65	3463.2	3609.2
60.0	3019.7	0.30197	2.22	-3.12	0.71	2952.5	3086.8
65.0	2588.8	0.25888	2.38	-3.04	0.78	2527.3	2650.4
70.0	2228.0	0.22280	2.53	-2.96	0.85	2171.7	2284.3
75.0	1924.6	0.19246	2.67	-2.89	0.92	1873.1	1976.0
80.0	1668.4	0.16684	2.81	-2.82	1.00	1621.5	1715.3
85.0	1451.3	0.14513	2.95	-2.75	1.07	1408.5	1494.2
90.0	1266.7	0.12667	3.08	-2.69	1.15	1227.7	1305.8
95.0	1109.2	0.11092	3.21	-2.62	1.22	1073.6	1144.8
100.0	974.26	0.097426	3.34	-2.56	1.30	941.74	1006.8
105.0	858.33	0.085833	3.46	-2.50	1.38	828.62	888.04

Type C2Q

Surface Mount Very Fast-Acting Chip Fuse

HF  C2Q Series – 0603 Size

RoHS Compliant

Features

- Fast-acting
- Small size, 0603 SMD
- Current rating from 250mA to 5A
- Wide operating temperature range from -55°C to 125°C
- Tape and Reel for automatic SMD placement
- Compatible with 260°C IR Pb-free and wave soldering process
- Full compliance with EU Directive 2011/65/EU and amending directive 2015/863 (MSL = 1)
- Halogen Free and Lead Free
- AEC-Q Compliant
- Meets Bel automotive qualification*
- * - Largely based on internal AEC-Q test plan



Applications

- Notebook
- LCD monitor
- PC computer
- Office electronic equipment
- Industrial equipment
- Medical equipment
- POE, POE+
- LCD / LED monitor
- Power supply
- LCD / LED TV
- DC-DC Converter

UK
CA c  US CE
AEC-Q Compliant

LEAD FREE = 
HALOGEN FREE = 

Electrical Characteristics (UL STD.248-14)

Testing Current	Blow Time	
	Minimum	Maximum
100%	4 Hrs.	N/A
200%	N/A	5 Sec
300%	N/A	0.2 Sec

Safety Agency Approvals

Safety Agency	Safety Agency Certificate	Ampere Rating/ Voltage Rating	Ampere Range / Volt @ I.R. ability*
	E506667	250mA-4A/32V AC 63V DC	250mA-4A/32V AC @ 35A 63V DC @ 50A
		5A / 32V AC & DC	5A / 32V AC & DC @ 50A
*I.R.= Interrupting Rating = Short Circuit Rating(Amps)			

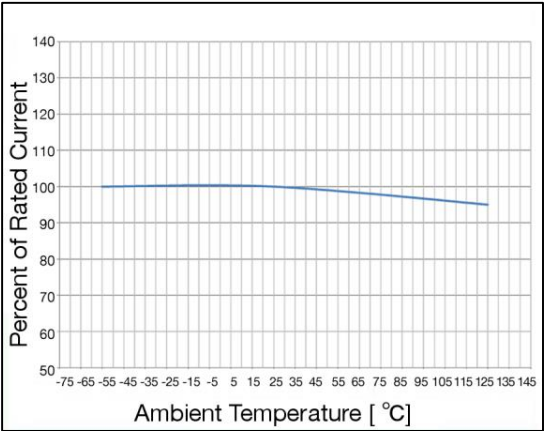
Physical Specifications

Materials	Body : Ceramic Substrate
	Terminations : Ag / Ni / Sn (100% Lead-free)
	Element Cover Coating : Lead-free Glass
Marking	On Fuse :
	None
	On Label :
	"bel", "C2Q", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and   (China RoHS compliant).

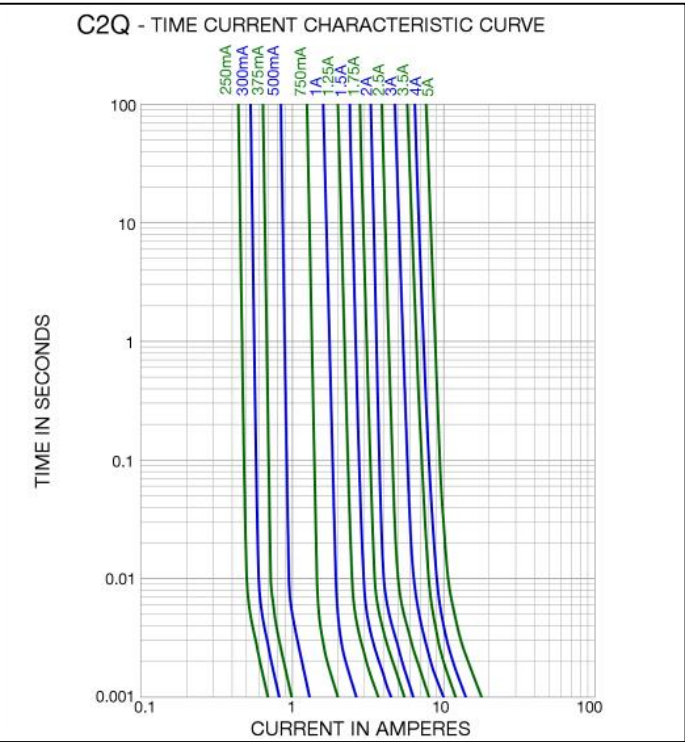
Type C2Q

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Temperature Derating Curve



Average Time Current Curve



Electrical Specifications

Catalog Number	Ampere Rating (A)	Nominal Cold Resistance (ohms)	Nominal Volt-drop @100% In (Volt)	Voltage and Interrupting Ratings	Nominal Melting I ² T @10 In (A ² Sec)	Nominal Power Dissipation @100% In (W)	Agency Approvals
							
C2Q 250	250mA	0.77	0.243	See Table of Safety Approvals on Page 1 for Voltage and associated Interrupting Ratings	0.00001	0.06	Y
C2Q 300	300mA	0.54	0.217		0.00003	0.07	Y
C2Q 375	375mA	0.42	0.196		0.00004	0.07	Y
C2Q 500	500mA	0.28	0.171		0.00015	0.09	Y
C2Q 750	750mA	0.17	0.159		0.0005	0.12	Y
C2Q 1	1A	0.122	0.154		0.0010	0.15	Y
C2Q 1.25	1.25A	0.092	0.152		0.0018	0.19	Y
C2Q 1.5	1.5A	0.073	0.146		0.0025	0.22	Y
C2Q 1.75	1.75A	0.063	0.144		0.0044	0.25	Y
C2Q 2	2A	0.053	0.133		0.0063	0.27	Y
C2Q 2.5	2.5A	0.042	0.130		0.0074	0.33	Y
C2Q 3	3A	0.034	0.130		0.018	0.39	Y
C2Q 3.5	3.5A	0.028	0.131		0.021	0.46	Y
C2Q 4	4A	0.023	0.131		0.042	0.52	Y
C2Q 5	5A	0.019	0.131		0.055	0.66	Y

Consult manufacturer for other ratings

Environmental Specifications



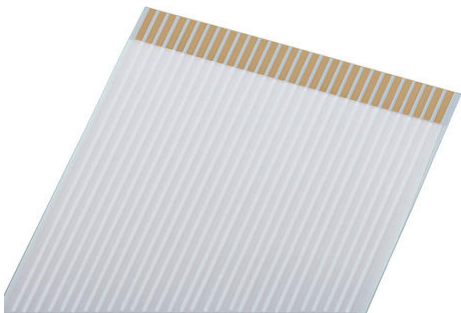
Specifications subject to change without notice

Bel Fuse Inc.
300 Executive Drive, Suite 300
West Orange, NJ 07052 USA

+1 201.432.0463
Bel.US.CS@belf.com
belfuse.com/circuit-protection



Part Number : [150390359](#)
Product Description : 1.00mm Pitch Premo-Flex FFC
Jumper, Same Side Contacts (Type A), 76.00mm Cable
Length, Gold (Au) Plating, 20 Circuits
Series Number : 15039
Status : Active
Product Category : Flat-Flexible Cable (FFC)



Documents & Resources

Drawings
[150390359 sd.pdf](#)
Specifications
[PS-15039-001-001.pdf](#)

Product Environment Compliance..

Compliance

GADSL/IMDS	Not Relevant
China RoHS	 per SJ/T 11365-2006
EU ELV	Not Relevant
Low-Halogen Status	Not Low-Halogen per IEC 61249-2-21
REACH SVHC	Not Contained per D(2023)8585-DC (23 Jan 2024)
EU RoHS	Compliant per EU 2015/863

Compliance Statements

- EU RoHS
- REACH SVHC
- Low-Halogen

Industry Documents

- IPC 1752A Class C
- IPC 1752A Class D
- Molex Product Compliance Declaration
- IEC-62474

- chemSHERPA (xml)

Substances of Interest

- PFAS

EU RoHS Certificate of Compliance

Additional Product Compliance Information

Part Details

General

Status	Active
Category	Flat-Flexible Cable (FFC)
Series	15039
Description	1.00mm Pitch Premo-Flex FFC Jumper, Same Side Contacts (Type A), 76.00mm Cable Length, Gold (Au) Plating, 20 Circuits
Comments	Contacts on the same side, Type A
Product Name	Premo-Flex FFC Jumper
UPC	193264175376

Electrical

Current - Maximum per Contact	1.2A
Voltage - Maximum	60V AC

Physical

Cable Length	76.00mm
Circuits (Loaded)	20
Contact Layout Type	A (same side)
Design Feature	Flexible
Material - Plating Mating	Gold
Packaging Type	Bag
Pitch - Mating Interface	1.00mm
Temperature Range - Operating	-40° to +105°C
Termination Style	FFC Connector
Wire/Cable Type	Flat Flex Cable
Wire Size (AWG)	N/A

Reference

- [1] *TE ECK100BH5AAA Datasheet*. www.te.com, 11.2024