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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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Feed-through connector, nominal current: 76 A, rated voltage (III/2): 1000 V, number of positions: 2, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Silver



The figure shows a 5-pos. version of the product

Why buy this product

- Allows connection of two conductors
- ☑ Inverted connector with pin contacts for touch-proof device outputs or free-hanging cable/cable connections
- ☑ Integrated double steel spring provides additional safety in the event of temperature and power fluctuations



Key Commercial Data

Packing unit	10 STK
GTIN	4 017918 994532
GTIN	4017918994532

Technical data

Item properties

Brief article description	Plug
Range of articles	DFK-IPC 16/ST
Pitch	10.16 mm
Type of contact	Female connector
Plug-in system	POWER COMBICON 16
Number of positions	2
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted
Screw thread	M4



Technical data

Item properties

Locking	without
Number of levels	1

Electrical parameters

Rated current	76 A
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

Connection capacity

Conductor cross section solid	0.75 mm² 16 mm²
Conductor cross section flexible	0.75 mm² 16 mm²
Conductor cross section AWG / kcmil	18 6
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm² 16 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm² 16 mm²
2 conductors with same cross section, solid	0.75 mm² 6 mm²
2 conductors with same cross section, flexible	0.75 mm² 6 mm²
2 conductors with same cross section, stranded, ferrules without plastic sleeve	0.5 mm² 4 mm²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm² 6 mm²

Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	Electroplated silver
Metal surface terminal point (top layer)	Silver (4 - 8 µm Ag)
Metal surface contact area (top layer)	Silver (4 - 8 μm Ag)

Material data - housing

Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Dimensions for the product

Length [1]	56.4 mm
Width [w]	44.44 mm
Height [h]	32.05 mm
Pitch	10.16 mm
Dimension a	10.16 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	10



Technical data

Packaging information

Denomination packing units	Pcs.
Outer packaging type	Carton

Ambient conditions

Ambient temperature (storage/transport)	-40 °C 70 °C
Ambient temperature (assembly)	-5 °C 100 °C
Ambient temperature (operation)	-40 °C

Termination and connection method

Conductor connection test	The stripped-off ends of the largest conductor can be completely inserted in the opening of the terminal point without using excessive force.
Test result	Test passed
Test – repeated connection and release	IEC 60999-1:1999-11
	Test passed
Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

Pull-out test

Pull-out test	IEC 60999-1:1999-11
	Test passed
Conductor cross section / conductor type / tensile force	0.75 mm² solid > 0.75 mm² / solid / > 30 N
	0.75 mm² flexible > 0.75 mm² / flexible / > 30 N
	16 mm² solid > 16 mm² / solid / > 100 N
	16 mm² flexible > 16 mm² / flexible / > 100 N
	flexible

Mechanical tests according to standard

Test specification	IEC 61984
Visual examination	Test passed IEC 60512-1-1:2002-02
Dimensional test	Test passed IEC 60512-1-2:2002-02
Resistance of marking	Test passed IEC 60068-2-70:1995-12
Result	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	50
Insertion strength per pos. approx.	10 N
Withdraw strength per pos. approx.	8 N
Polarization and coding	Test passed IEC 60512-13-5:2006-02
Result	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	48 N

Air clearances and creepage distances

Specification	IEC 60664-1:2007-04



Technical data

Air clearances and creepage distances

Insulating material group	I
Comparative tracking index (IEC 60112:2003-01)	CTI 600
Voltage	1000 V
Rated insulation voltage (III/3)	1000 V
Rated insulation voltage (III/2)	1000 V
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (III/3)	8 kV
Rated surge voltage (III/2)	8 kV
Rated surge voltage (II/2)	6 kV
Minimum clearance - inhomogeneous field (III/3)	8 mm
Minimum clearance - inhomogeneous field (III/2)	8 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	12.5 mm
Minimum creepage distance value (III/2)	5 mm
Minimum creepage distance value (II/2)	5 mm

Electrical tests - Function

Specification	IEC 60999-1:1999-11
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Temperature cycles

Specification	IEC 60999-1:1999-11
Test current (minimum cross section)	9 A DC
Test current (maximum cross section)	76 A DC
Temperature cycles	192

Current carrying capacity / derating curves

Specification	IEC 61984
Specification	ILC 01304

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	10 N
Withdraw strength per pos. approx.	8 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R ₁	0.35 mΩ
Insertion/withdrawal cycles	50
Contact resistance R ₂	0.34 mΩ
Impulse withstand voltage at sea level	9.8 kV
Power-frequency withstand voltage	4.26 kV
Insulation resistance, neighboring positions	6 ΤΩ



Technical data

Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	0.2 dm³ SO₂ on 300 dm³/40 °C/1 cycle
Impulse withstand voltage at sea level	9.8 kV
Power-frequency withstand voltage	4.26 kV

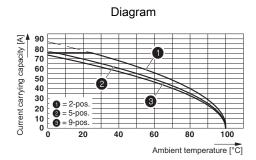
Environmental and durability tests (E)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

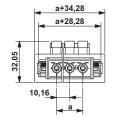
Drawings

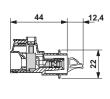


Derating curve for: IPC 16/...-ST-10.16 with DFK-IPC 16/...-ST-10.16

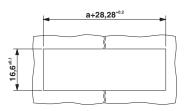
Type: ISPC 16/...-ST-10,16 with DFK-IPC 16/...-ST-10,16

Dimensional drawing





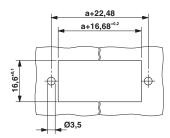
Dimensional drawing



Sheet metal cutout for snap-lock device for "ST" versions



Dimensional drawing



Sheet metal cutout for screw connection.

Approvals

Approvals

Approvals

EAC / cULus Recognized

Ex Approvals

Approval details

EAC B.01742

cULus Recognized c US	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E60425-20040202	
	В	С
Nominal voltage UN	600 V	600 V
Nominal current IN	55 A	55 A
mm²/AWG/kcmil	20-6	20-6

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