

# Printed-circuit board connector - DFK-MSTB 2,5/ 6-GF-5,08 - 0710219

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Feed-through header, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 6, pitch: 5.08 mm, connection method: Solder/Slip-on connection, color: green, contact surface: Tin, mounting: Direct mounting, pin layout: Linear pinning, solder pin [P]: 9.3 mm

The figure shows a 10-position version of the product

## Your advantages

- Cable connection on the inside of the device enables flexible positioning of the panel feed-through
- Free choice – permanent solder connection or standardized slip-on connection
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- Screwable flange for superior mechanical stability



## Key Commercial Data

Packing unit	50 pc
GTIN	
GTIN	4017918005245

## Technical data

### Item properties

Brief article description	Feed-through header
Plug-in system	CLASSIC COMBICON
Type of contact	Male connector
Range of articles	DFK-MSTB 2,5/...-GF
Pitch	5.08 mm
Number of positions	6
Connection method	Solder/Slip-on connection
Mounting type	Direct mounting
Pin layout	Linear pinning
Locking	Threaded flange
Number of levels	1

# Printed-circuit board connector - DFK-MSTB 2,5/ 6-GF-5,08 - 0710219

## Technical data

### Item properties

Number of connections	6
Number of potentials	6

### Electrical parameters

Nominal current	12 A
Nom. voltage	320 V
Rated voltage	320 V
Rated voltage (III/2)	320 V
Rated voltage (II/2)	630 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV

### Connection capacity

Connection method	Solder/Slip-on connection
pluggable	Yes
Conductor cross section solid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG / kcmil	24 ... 12

### 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	Tin-plated
Metal surface contact area (top layer)	Tin (5 - 7 µm Sn)
Metal surface contact area (middle layer)	Nickel (2 - 3 µm Ni),
Metal surface soldering area (top layer)	Tin (5 - 7 µm Sn)
Metal surface soldering area (middle layer)	Nickel (2 - 3 µm Ni)

### Material data - housing

Housing color	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V2

### Dimensions for the product

Length [ l ]	17.5 mm
Width [ w ]	50.8 mm
Height [ h ]	29.5 mm
Pitch	5.08 mm
Height (without solder pin)	20.2 mm
Solder pin [P]	9.3 mm

# Printed-circuit board connector - DFK-MSTB 2,5/ 6-GF-5,08 - 0710219

## Technical data

### Dimensions for the product

Pin dimensions	0.8 x 2.8 mm
Dimensions of slip-on connection	2,8 x 0,8 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)

### Termination and connection method

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	0.2 mm <sup>2</sup> / solid / > 10 N
	0.2 mm <sup>2</sup> / flexible / > 10 N
	2.5 mm <sup>2</sup> / solid / > 50 N
	2.5 mm <sup>2</sup> / flexible / > 50 N

### Mechanical tests according to standard

Test specification	IEC 61984
Visual inspection	IEC 60512-1-1:2002-02
Dimension check	IEC 60512-1-2:2002-02
Resistance of inscriptions	IEC 60068-2-70:1995-12
Insertion and withdrawal force	IEC 60512-13-2:2006-02
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
Polarization and coding	IEC 60512-13-5:2006-02
Contact holder in insert	IEC 60512-15-1:2008-05
Test force per pos.	30 N

### Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Minimum clearance - inhomogeneous field (III/3)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm

# Printed-circuit board connector - DFK-MSTB 2,5/ 6-GF-5,08 - 0710219

## Technical data

### Air clearances and creepage distances

Minimum creepage distance value (III/3)	4 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 mm

### Current carrying capacity / derating curves

Caption	Type: FKCVR 2,5/...-STF-5,08 with DFK-MSTB 2,5/...-GF-5,08
Specification	IEC 61984:2008-10
Reduction factor	0.8
Note	Representation based on IEC 60512-5-2:2002-02
	For number of positions, see diagram

### Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 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 <sub>1</sub>	1.3 mΩ
Insertion/withdrawal cycles	25
Contact resistance R <sub>2</sub>	1.5 mΩ
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV
Insulation resistance, neighboring positions	> 20 GΩ

### Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	16
Conductor cross section	2.5 mm <sup>2</sup>
Test current	12 A
Upper limiting temperature requirements <100 °C	Test passed

### Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV

### Environmental and durability tests (E)

Specification	IEC 61984:2008-10
---------------	-------------------

# Printed-circuit board connector - DFK-MSTB 2,5/ 6-GF-5,08 - 0710219

## Technical data

### Environmental and durability tests (E)

Result, degree of protection, IP code	Finger safety with IP20 test finger
---------------------------------------	-------------------------------------

### Standards and Regulations

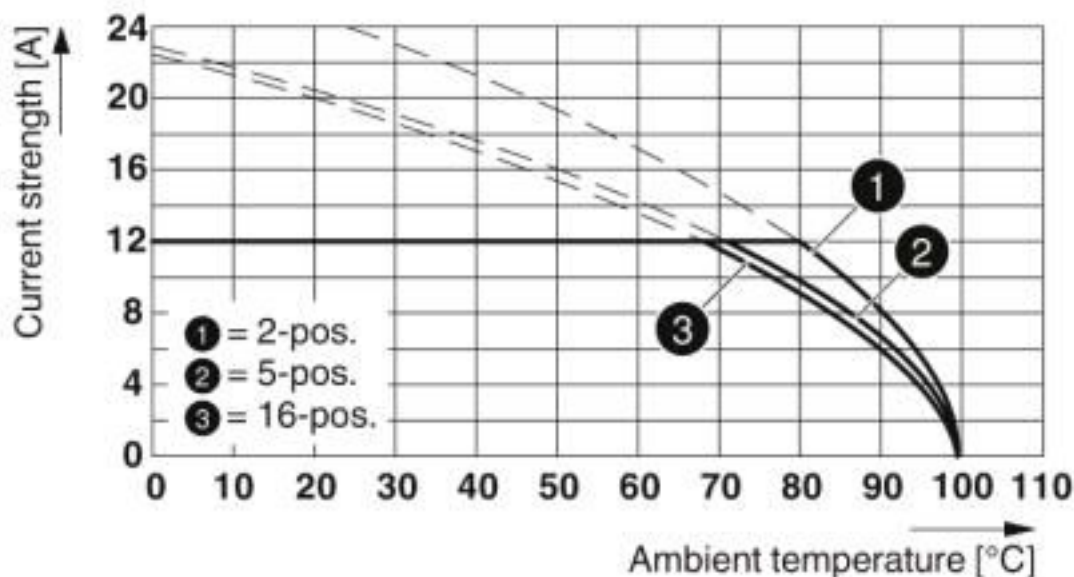
Connection in acc. with standard	EN-VDE
	CSA
Flammability rating according to UL 94	V2

### Environmental Product Compliance

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

## Drawings

Diagram



Type: FKCVR 2,5/...-STF-5,08 with DFK-MSTB 2,5/...-GF-5,08

## Classifications

eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700

# Printed-circuit board connector - DFK-MSTB 2,5/ 6-GF-5,08 - 0710219

## Classifications

### eCl@ss

eCl@ss 7.0	27440402
eCl@ss 8.0	27440402
eCl@ss 9.0	27440402

### ETIM

ETIM 3.0	EC001283
ETIM 4.0	EC001283
ETIM 5.0	EC001283
ETIM 6.0	EC002637
ETIM 7.0	EC002637

### UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121410
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

## Approvals

### Approvals

---

#### Approvals

CSA / IECEx CB Scheme / EAC / cULus Recognized / VDE Zeichengenehmigung

---

#### Ex Approvals

---

### Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	15 A	10 A	

# Printed-circuit board connector - DFK-MSTB 2,5/ 6-GF-5,08 - 0710219

## Approvals

IECEE CB Scheme	<b>CB</b> scheme	<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-60988-B1B2
Nominal voltage UN		250 V	
Nominal current IN		12 A	

EAC	<b>EAC</b>	B.01687
-----	------------	---------

cULus Recognized	<b>cULus</b>	<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E60425-19931011
		B	D
Nominal voltage UN		300 V	300 V
Nominal current IN		15 A	10 A

VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40050648
Nominal voltage UN		250 V	
Nominal current IN		12 A	

## Accessories

Accessories

Coding element

Coding section - CR-MSTB - 1734401

Coding section, inserted into the recess in the header or the inverted plug, red insulating material



## Connector

## Printed-circuit board connector - DFK-MSTB 2,5/ 6-GF-5,08 - 0710219

### Accessories

Connector - C-SCF 1/2,8X0,8 - 3240153



Slip-on sleeve, non-insulated, 0.5 ... 1 mm<sup>2</sup>, 2.8 x 0.8

Connector - C-SCFI 1,5/2,8X0,8 - 3240049



Slip-on sleeve, red, 0.5 ... 1.5 mm<sup>2</sup>, 2.8 x 0.8

### Filler plug

Accessories - MSTB-BL - 1755477



Keying cap, for forming sections, plugs onto header pin, green insulating material

### Mounting material

Screw set - DFK-MSTB-SS - 0708263



Screw set, for securing the header to the device wall, consists of an M3 x 10 screw, with a spring washer and a nut

### Additional products

Printed-circuit board connector - QC 1/ 6-STF-5,08 - 1883394



PCB connector, nominal current: 10 A, rated voltage (III/2): 630 V, nominal cross section: 1 mm<sup>2</sup>, number of positions: 6, pitch: 5.08 mm, connection method: Displacement connection, color: green, contact surface: Tin



## Printed-circuit board connector - DFK-MSTB 2,5/ 6-GF-5,08 - 0710219

### Accessories

#### Printed-circuit board connector - FRONT-MSTB 2,5/ 6-STF-5,08 - 1777840

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 6, pitch: 5.08 mm, connection method: Front screw connection, color: green, contact surface: Tin



#### Printed-circuit board connector - FKCVR 2,5/ 6-STF-5,08 - 1874141

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 6, pitch: 5.08 mm, connection method: Push-in spring connection, color: green, contact surface: Tin



#### Printed-circuit board connector - FKCVW 2,5/ 6-STF-5,08 - 1873841

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 6, pitch: 5.08 mm, connection method: Push-in spring connection, color: green, contact surface: Tin



#### Printed-circuit board connector - FKC 2,5/ 6-STF-5,08 - 1873249

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 6, pitch: 5.08 mm, connection method: Push-in spring connection, color: green, contact surface: Tin



#### Printed-circuit board connector - TMSTBP 2,5/ 6-STF-5,08 - 1853146

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 6, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin, The plug allows conductors to be looped through from module to module.



## Printed-circuit board connector - DFK-MSTB 2,5/ 6-GF-5,08 - 0710219

### Accessories

#### Printed-circuit board connector - MVSTBW 2,5/ 6-STF-5,08 - 1834945



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 6, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

#### Printed-circuit board connector - MSTBC 2,5/ 6-STZF-5,08 - 1809776



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 6, pitch: 5.08 mm, connection method: Crimp connection, color: green, Corresponding female crimp contacts with current [A] and conductor cross section range [mm<sup>2</sup>] data: 10A/MSTBC-MT 0,5-1,0 (3190564); 10A/MSTBC-MT 0,5-1,0 BA (3190645); 12A/MSTBC-MT 1,5-2,5 (3190551); 12A/MSTBC-MT 1,5-2,5 BA (3190658). BA = Bandkontakte

#### Printed-circuit board connector - MSTBT 2,5/ 6-STF-5,08 - 1805343



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 6, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

#### Printed-circuit board connector - MSTB 2,5/ 6-STF-5,08 - 1778027



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 6, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

#### Printed-circuit board connector - FKCT 2,5/ 6-STF-5,08 - 1902343



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 6, pitch: 5.08 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

## Printed-circuit board connector - DFK-MSTB 2,5/ 6-GF-5,08 - 0710219

### Accessories

Printed-circuit board connector - MVSTBR 2,5/ 6-STF-5,08 - 1835135



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 6, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

---

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Pluggable Terminal Blocks](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[57.510.0053](#) [MC 1.5/ 6-ST-3.5 GY AU](#) [734-104](#) [734-302](#) [8-141-P](#) [8426620000](#) [860505](#) [860810](#) [GBPACX-12](#) [93.731.4953.0](#) [PV05-5,08-K](#)  
[PVP02-5,00](#) [PVP03-3,50](#) [PVP04-3,50](#) [PVS02-5,00](#) [1-1986160-3](#) [1377680000](#) [1531000000](#) [1546228-5](#) [ELFH16150](#) [ELFP03110](#)  
[ELFP10210](#) [ELFT06250](#) [ELVP03100](#) [1700101](#) [1700410](#) [1700425](#) [1702246](#) [1705229](#) [1710175](#) [1714537](#) [1717806](#) [1719600](#) [1728941](#)  
[1734692](#) [1734795](#) [1736036](#) [1740194](#) [1740291](#) [1740628](#) [1740990](#) [1746952](#) [1750207](#) [1752441](#) [1752865](#) [1754115](#) [1754144](#) [1756913](#)  
[1760051](#) [1760336](#)