

Printed-circuit board connector - DFK-MSTBA 2,5/ 7-GF-5,08 - 1899032

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Feed-through header, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Male connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: DFK-MSTBA 2,5/...-GF, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.2 mm, Number of solder pins per potential: 1, plug-in system: CLASSIC COMBICON, Pin connector pattern alignment: Standard, Locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard


The figure shows a 10-position version of the product

Your advantages

- ✓ Inside: with horizontal or vertical solder connection
- ✓ Inside of the housing is protected against dust by the seal provided
- ✓ Mounting from the inside of the device through the housing panel
- ✓ Headers for assembly in a device/housing panel
- ✓ 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	4017918186500

Technical data

Item properties

Brief article description	Feed-through header
Connector system	CLASSIC COMBICON
Type of contact	Male connector
Range of articles	DFK-MSTBA 2,5/...-GF
Pitch	5.08 mm
Number of positions	7
Mounting type	Wave soldering

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Technical data

Item properties

Pin layout	Linear pinning
Locking	Threaded flange
Number of rows	1
Number of connections	7
Number of potentials	7
Pin connector pattern alignment	Standard

Electrical parameters

Nominal current	12 A
Nom. voltage	320 V
Rated voltage (III/3)	250 V
Rated voltage (III/2)	320 V
Rated voltage (II/2)	400 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV

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	PBT
Insulating material group	IIIa
CTI according to IEC 60112	225
Flammability rating according to UL 94	V0

Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	12 mm
Width [w]	65.32 mm
Height [h]	18.2 mm
Pitch	5.08 mm
Height (without solder pin)	18.2 mm
Solder pin [P]	3.2 mm
Pin dimensions	1 x 1 mm

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Technical data

Dimensions for PCB design

Hole diameter	1.4 mm
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Packaging information

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

General product information

Type of note	Notes on operation
Note	In accordance with IEC 61984, COMBICON connectors have no switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load.

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)

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

Standards and Regulations

Connection in acc. with standard	EN-VDE
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Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Classifications

eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 11.0	27460201
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27141100

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Classifications

eCl@ss

eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141134
eCl@ss 9.0	27440402

ETIM

ETIM 3.0	EC001283
ETIM 4.0	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

VDE Zeichengenehmigung / IECCEB Scheme / EAC / cULus Recognized

Ex Approvals

Approval details

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

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Approvals

IECEE CB Scheme	CB scheme	http://www.iecee.org/	DE1-60988-B1B2
Nominal voltage UN		250 V	
Nominal current IN		12 A	

EAC	EAC	B.01687
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cULus Recognized	cULus	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19931011
B		D	
Nominal voltage UN		300 V	
Nominal current IN		15 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

Filler plug

Accessories - MSTB-BL - 1755477



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

Mounting material

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Accessories

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 - TVMSTB 2,5/ 7-STF-5,08 - 1719147



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 400 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 14, product range: TVMSTB 2,5/...-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 90 °, Locking clip: - without locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

Printed-circuit board connector - FKCN 2,5/ 7-STF-5,08 - 1754843



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: FKCN 2,5/...-STF, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

Printed-circuit board connector - FRONT-MSTB 2,5/ 7-STF-5,08 - 1777853



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: FRONT-MSTB 2,5/...-STF, pitch: 5.08 mm, connection method: Front screw connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

Printed-circuit board connector - MSTB 2,5/ 7-STF-5,08 - 1778030



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: MSTB 2,5/...-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

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Accessories

Printed-circuit board connector - MSTBT 2,5/ 7-STF-5,08 - 1805356

PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: MSTBT 2,5/-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard



Printed-circuit board connector - MSTBC 2,5/ 7-STZF-5,08 - 1809789

PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: MSTBC 2,5/-STZF, pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross section range [mm²] 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 - MVSTBW 2,5/ 7-STF-5,08 - 1834958

PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: MVSTBW 2,5/-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -90 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard



Printed-circuit board connector - MVSTBR 2,5/ 7-STF-5,08 - 1835148

PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: MVSTBR 2,5/-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 90 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard



Printed-circuit board connector - TMSTBP 2,5/ 7-STF-5,08 - 1853159

PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 14, product range: TMSTBP 2,5/-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard, The plug allows conductors to be looped through from module to module.



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Accessories

Printed-circuit board connector - FKC 2,5/ 7-STF-5,08 - 1873252



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: FKC 2,5/..-STF, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

Printed-circuit board connector - FKCVW 2,5/ 7-STF-5,08 - 1873854



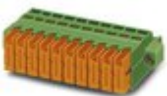
PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: FKCVW 2,5/..-STF, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: -90 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

Printed-circuit board connector - FKCVR 2,5/ 7-STF-5,08 - 1874154



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: FKCVR 2,5/..-STF, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 90 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

Printed-circuit board connector - QC 1/ 7-STF-5,08 - 1883404



PCB connector, nominal cross section: 1 mm², color: green, nominal current: 10 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: QC 1/..-STF, pitch: 5.08 mm, connection method: Displacement connection, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

Printed-circuit board connector - FKCT 2,5/ 7-STF-5,08 - 1902356



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: FKCT 2,5/..-STF, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

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Accessories

Printed-circuit board connector - TFKC 2,5/ 7-STF-5,08 - 1962749



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 14, product range: TFKC 2,5/..-STF, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

Printed-circuit board connector - SMSTB 2,5/ 7-STF-5,08 - 1971112



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: SMSTB 2,5/..-STF, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -45 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

Printed-circuit board connector - FKCS 2,5/ 7-STF-5,08 - 1975312



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 7, Number of rows: 1, Number of positions per row: 7, number of connections: 7, product range: FKCS 2,5/..-STF, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - Locking clip, plug-in system: CLASSIC COMBICON, Locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard