

1053586

https://www.phoenixcontact.com/us/products/1053586

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shielded SMD male connector, nominal current: 1.7 A, Test voltage: 500 V AC, number of positions: 20, pitch: 0.8 mm, color: black, contact surface: Gold, contact connection type: Pin, mounting: SMD soldering

Your advantages

- · Gold-plated contacts ensure transfer quality remains stable over the long term
- · Reliable mechanical and electrical connections, thanks to the double-sided ScaleX contact system
- · Robustness: ScaleX technology for high tolerance compensation and protection of contacts
- · Flexible device design: various numbers of positions, designs, and stack heights with high wipe lengths

Commercial data

Item number	1053586
Packing unit	1 pc
Minimum order quantity	500 pc
Sales key	AA23
Product key	AAWJDB
GTIN	4055626685397
Weight per piece (including packing)	1.905 g
Weight per piece (excluding packing)	1.78 g
Customs tariff number	85366930
Country of origin	CN



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Technical data

Product properties

Product type	shielded SMD male connector
Product family	FP 0,8/MV-SH 1,15
Number of positions	20
Pitch	0.8 mm
Number of rows	2
Number of potentials	20
Pin layout	Linear pad geometry
Electrical characteristic	shielded

Electrical properties

Nominal current I _N	1.7 A IEC 60512-5-2:2002-02 (at 20°C 52-pos.)
Degree of pollution	3
Contact resistance	20 mΩ
Test voltage	500 V AC IEC 60512-4-1:2003
Electrical characteristic	shielded

Mounting

Mounting type	SMD soldering
Pin layout	Linear pad geometry

Processing notes

Process	Reflow soldering
Moisture Sensitive Level	MSL 1
Classification temperature T _c	260 °C

Material specifications

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	Selective coating
Metal surface contact area (top layer)	Gold (Au)
Metal surface contact area (middle layer)	Nickel (Ni)
Metal surface soldering area (top layer)	Tin (Sn)
Metal surface soldering area (middle layer)	Nickel (Ni)

Material data - housing

Color (Housing)	black (9005)
Insulating material	LCP
Insulating material group	IIIb
CTI according to IEC 60112	150



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Flammability rating according to UL 94	V0
res	
Notes on operation	The permissible voltage during operation depends on the application, taking into consideration the air clearances and creepage distances within the scope of insulation requirements accordance with IEC 60664-1.
Details for soldering processes	The items are suitable for assembly on both sides and for overhead soldering.
nensions	
Dimensional drawing	ph ph
Pitch	0.8 mm
Width [w]	11.9 mm
Height [h]	6.25 mm
Length [I]	6.1 mm
Installed height	5.65 mm
pplication	
Contact cover	0.8 mm
Center offset	± 0.7 mm in longitudinal and transverse direction
Stack height	6 mm Tolerance: +1,5 mm (in combination with Range of articles:FP 0,8/FV-SH 4,85)
	9 mm Tolerance: +1,5 mm (in combination with Range of articles:FP 0,8/FV-SH 7,85)
	12 mm Tolerance: +1,5 mm (in combination with Range of articles:FP 0,8/FV-SH 10,85)
Wipe length	1.5 mm
Angular tolerance	\pm 5 $^{\circ}$ in longitudinal and transverse direction (when plugging in)
	± 5 ° in longitudinal and transverse direction (when plugged in)
Axial offset in X direction (longitudinal)	± 0.3 mm (Tolerance compensation when plugged in)
Axial offset in Y direction (transversal)	± 0.3 mm (Tolerance compensation when plugged in)
CB design	
Pad geometry	0.5 x 1.1 mm
ctrical tests	
nsulation resistance	
Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	≥ 5 GΩ
ir clearances and creepage distances	



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Minimum value for clearance and creepage distance	0.25 mm
vironmental and real-life conditions	
Vibration test	
Specification	IEC 60068-2-6:2007-12
Frequency	10 - 2000 - 10 Hz
Sweep speed	1 octave/min
Amplitude	1.5 mm (10 Hz 60.1 Hz)
Sweep speed	200 m/s² (58 Hz 2000 Hz)
Test duration per axis	2.5 h
Durability test	
Specification	IEC 60512-9-1:2010-03 (following)
Contact resistance R ₁	20 mΩ
Contact resistance R ₂	20 mΩ
Insertion/withdrawal cycles	500
Shocks	
Specification	IEC 60068-2-27:2008-02
Pulse shape	Semi-sinusoidal
Acceleration	490 m/s²
Shock duration	11 ms
Test directions	X-, Y- and Z-axis (pos. and neg.)
	,
Ambient conditions	
Ambient temperature (operation)	-55 °C 125 °C
Ambient temperature (storage/transport)	-40 °C 70 °C
Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly)	-5 °C 100 °C
ckaging specifications	
Dimensional drawing	
	W. T. A. T.

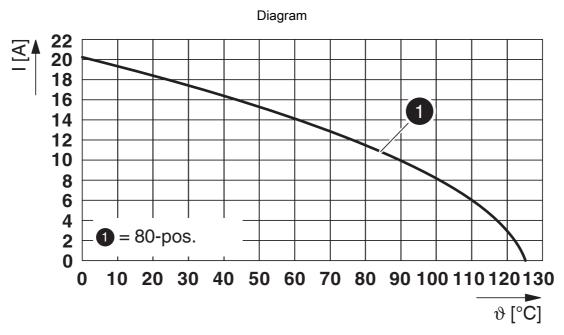
	W A
Type of packaging	24 mm wide tape
[W] tape width	24.4 mm
[W2] coil overall dimension	30.4 mm
[A] coil diameter	330 mm
Outer packaging type	Transparent-Bag
ESD level	(D) electrostatically conductive
Specification	DIN EN 61340-5-1 (VDE 0300-5-1): 2008-07



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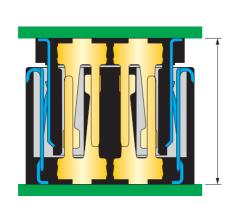
https://www.phoenixcontact.com/us/products/1053586

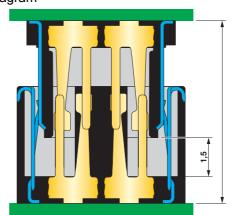
Drawings



Type: FP 0,8/...-MV-SH 1,15 with FP 0,8/...-FV-SH 10,85 - shroud

Schematic diagram

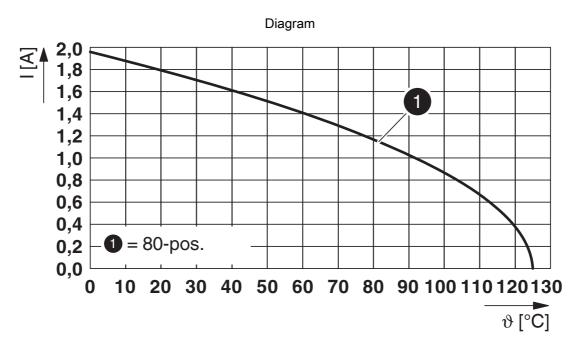






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Type: FP 0,8/...-MV-SH 1,15 with FP 0,8/...-FV-SH 10,85 - contacts



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1053586



EAC

Approval ID: B.00511/19



cULus Recognized Approval ID: E118976-20190703



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Classifications

ECLASS

	ECLASS-11.0	27460201	
	ECLASS-12.0	27460201	
	ECLASS-13.0	27460201	
ETIM			
	ETIM 8.0	EC002637	
UNSPSC			
	UNSPSC 21.0	39121400	



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Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values



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Mandatory accessories

FP 0,8/20-FH-SH - SMD female connector shielded

1053616

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Shielded SMD female connector, nominal current: 1.7 A, Test voltage: 500 V AC, number of positions: 20, pitch: 0.8 mm, color: black, contact surface: Gold, contact connection type: Socket, mounting: SMD soldering

FP 0,8/20-FV-SH 10,85 - SMD female connectors

1154032

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Shielded SMD female connector, nominal current: 1.7 A, Test voltage: 500 V AC, number of positions: 20, pitch: 0.8 mm, color: black, contact surface: Gold, contact connection type: Socket, mounting: SMD soldering



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FP 0,8/20-FV-SH 4,85 - SMD female connector shielded

1053612

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Shielded SMD female connector, nominal current: 1.7 A, Test voltage: 500 V AC, number of positions: 20, pitch: 0.8 mm, color: black, contact surface: Gold, contact connection type: Socket, mounting: SMD soldering

FP 0,8/20-FV-SH 7,85 - SMD female connector shielded

1053614

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Shielded SMD female connector, nominal current: 1.7 A, Test voltage: 500 V AC, number of positions: 20, pitch: 0.8 mm, color: black, contact surface: Gold, contact connection type: Socket, mounting: SMD soldering

Accessories



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FP 0,8/20-FV-SH 4,85 - SMD female connector shielded

1053612

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