FS 0,635/ 20-MV-R- 5,0 - SMD male connectors

1332120

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SMD male connector, nominal current: 0.5 A, Test voltage: 500 V AC, number of positions: 20, pitch: 0.635 mm, color: black, contact surface: Gold, contact connection type: Pin, mounting: SMD soldering

Your advantages

- Design-in support during device development through M-CAD/E-CAD data and a free sample service
- Cost and space savings with the comprehensive portfolio available in various stack heights
- Easy mating with integrated keyways and tolerance compensation for error-free production
- Time savings during the development process with customer-specific simulations for data integrity
- High-speed data transmission up to 30 Gbps for various possible applications

Commercial data

Item number	1332120
Packing unit	850 pc
Minimum order quantity	850 pc
Sales key	AA23
Product key	AAWGCA
GTIN	4063151629229
Weight per piece (including packing)	0.91 g
Weight per piece (excluding packing)	0.91 g
Customs tariff number	85366930
Country of origin	CN

Technical data

Product properties

Product type	SMD male connector
Product family	FS 0,635/..-MV-R- 5,0
Number of positions	20
Pitch	0.635 mm
Number of rows	2
Pin layout	Linear pad geometry

Electrical properties

Nominal current I_N	0.5 A (40-pos. / 60-pos.)
Degree of pollution	3
Contact resistance	40 mΩ
Test voltage	500 V AC IEC 60512-4-1:2003
Rated voltage (I/1)	125 V
Rated surge voltage (I/1)	0.8 kV

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
Solder cycles in the reflow	3

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)

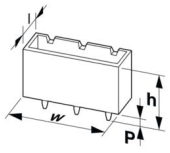
Material data - housing

Color (Housing)	black (9005)
Insulating material	LCP

Notes

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 in accordance with IEC 60664-1.

Dimensions

Dimensional drawing	
Pitch	0.635 mm
Width [w]	13.22 mm
Height [h]	5.6 mm
Length [l]	5.2 mm
Installed height	5 mm

Application

Contact cover	0.6 mm
Center offset	± 0.5 mm in longitudinal and transverse direction
Stack height	6 mm Tolerance: +0.6 mm (in combination with Range of articles:FS 0,635/..-FV-R- 4,0)
	12 mm Tolerance: +0.6 mm (in combination with Range of articles:FS 0,635/..-FV-R-10,0)
Wipe length	0.6 mm
Angular tolerance	± 10 ° in longitudinal and transverse direction (when plugging in)
	± 2 ° in longitudinal and transverse direction (when plugged in)

PCB design

Pad geometry	0.35 x 1.8 mm
Hole diameter	0.9 mm

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-2:2002-02
Tested number of positions	60

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	≥ 5 GΩ

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Minimum value for clearance and creepage distance	0.19 mm

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 55 - 10 Hz
Sweep speed	1 octave/min
Amplitude	1.52 mm
Sweep speed	181 m/s²
Test duration per axis	2 h

Durability test

Specification	IEC 60512-9-1:2010-03 (following)
Contact resistance R_1	40 mΩ
Contact resistance R_2	40 mΩ
Insertion/withdrawal cycles	50
Insulation resistance, neighboring positions	≥ 5 GΩ

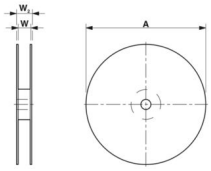
Climatic test

Specification	IEC 60068-2-60:2015-06
Corrosive stress	Method 4, 10 days
Thermal stress	125 °C/168 h
Power-frequency withstand voltage	500 V

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

Packaging specifications

Dimensional drawing	
Type of packaging	32 mm wide tape
[W] tape width	32 mm
[W2] coil overall dimension	38.4 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

Classifications

ECLASS

ECLASS-11.0	27460201
ECLASS-12.0	27460201
ECLASS-13.0	27460201

ETIM

ETIM 9.0	EC002637

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

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

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