Feed-through header - DMCV 0,5/ 2-G1SHL-2,54P20THR24 - 1150824

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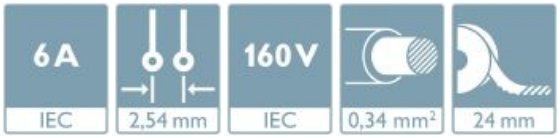
The figure shows a 2-pos. version with 4 contacts

PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.34 mm², number of positions: 2, pitch: 2.54 mm, color: black, contact surface: Gold, solder pin [P]: 2 mm

Your advantages

- Gold-plated contacts ensure transfer quality remains stable over the long term
- Designed for integration into the SMT process
- Conductor connection on several levels enables higher contact density with the same surface area
- Supplied in tape-on-reel packing according to IEC 60286-3 for automated mounting



Key Commercial Data

Packing unit	1
GTIN	4 063151 147341
GTIN	4063151147341
Custom tariff number	85366930

Technical data

Item properties

Plug-in system	MICRO COMBICON - DFMC 0,5 lock & shielded
Electrical characteristic	shielded
Range of articles	DMCV 0,5/..-G1SHL-THR
Number of positions	2

Electrical parameters

Nominal current	6 A

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Electrical parameters

Nom. voltage	160 V
Rated voltage	50 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	160 V
Rated surge voltage (III/3)	0.8 kV
Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (II/2)	1.5 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	Completely gold-plated
Metal surface contact area (top layer)	Gold (0.25 Au)
Metal surface contact area (middle layer)	Nickel (2 - 4 µm Ni),
Metal surface soldering area (top layer)	Gold (0.25 Au)
Metal surface soldering area (middle layer)	Nickel (2 - 4 µm Ni)

Material data - housing

Housing color	black (9005)
Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	8.19 mm
Width [w]	9.66 mm
Height [h]	11.91 mm
Pitch	2.54 mm
Height (without solder pin)	9.91 mm
Solder pin [P]	2 mm

Dimensions for PCB design

Hole diameter	1.2 mm

Packaging information

Type of packaging	24 mm wide tape
Pieces per package	200

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Packaging information

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

Processing notes

Process	Reflow/wave soldering
Specification	Following IPC/JEDEC J-STD-020E:2014-12
	Following IEC 61760-1:2006-04
	Follwing IEC 60068-2-58:2015-03
Moisture Sensitive Level	MSL 1
Classification temperature T_c	260 °C
Solder cycles in the reflow	3

Ambient conditions

Ambient temperature (storage/transport)	-20 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 80 °C
Ambient temperature (installation)	-40 °C ... 80 °C (dependent on the derating curve)
Ambient temperature (mobile installation)	-20 °C 80 °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)	0.8 mm
Minimum clearance - inhomogeneous field (III/2)	1.5 mm
Minimum clearance - inhomogeneous field (II/2)	0.5 mm
Minimum creepage distance value (III/3)	1.25 mm
Minimum creepage distance value (III/2)	1.6 mm
Minimum creepage distance value (II/2)	1.6 mm

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	3 N
Withdraw strength per pos. approx.	3 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

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Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R_1	5 mΩ
Insertion/withdrawal cycles	100
Contact resistance R_2	4.6 mΩ
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV
Insulation resistance, neighboring positions	> 0.02 TΩ

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	2
Conductor cross section	0.34 mm²
Test current	6 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	80 °C/168 h
Corrosive stress	0.2 dm^3 SO_2 on 300 dm^3/40 °C/1 cycle
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV

Environmental and durability tests (E)

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

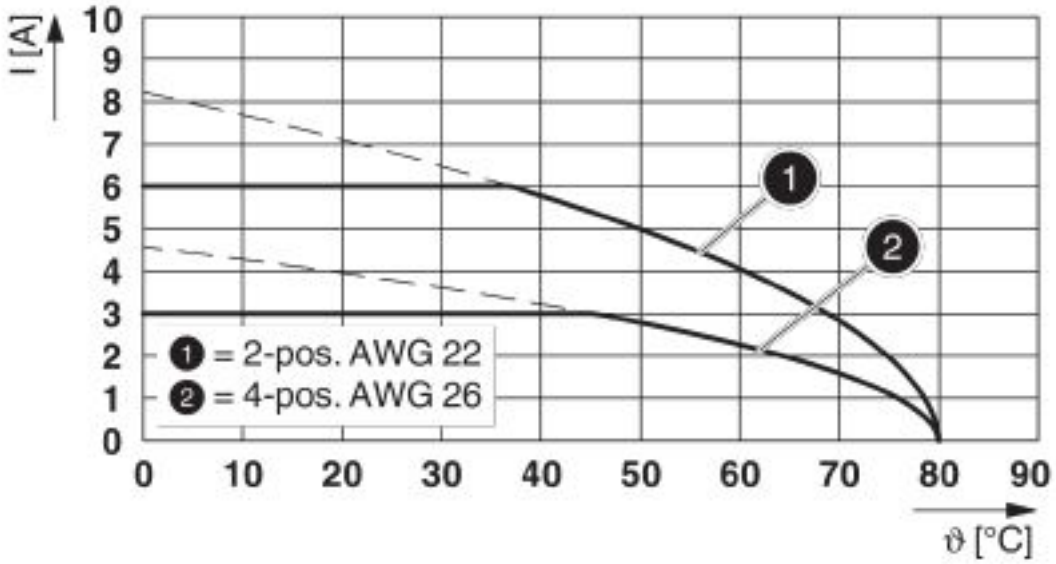
Vibration test

Specification	IEC 60068-2-6:2007-12
Result	Test passed
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	50 m/s^2 (60.1 - 150 Hz)
Test duration per axis	2.5 h

Drawings

Feed-through header - DMCV 0,5/ 2-G1SHL-2,54P20THR24 - 1150824

Diagram



Type: DMCC 0,5/...-ST-SHL 7,0-2,54 with DMCV 0,5/...-G1SHL-2,54P20THR...

Classifications

eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 8.0	27440402
eCl@ss 9.0	27440402

ETIM

ETIM 5.0	EC002637

Approvals

Approvals

Approvals

EAC / VDE Gutachten mit Fertigungsüberwachung / IECEE CB Scheme / cULus Recognized

Ex Approvals

Approval details

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Approvals

EAC		B.01687

VDE Gutachten mit Fertigungsüberwachung	http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40042389

Nominal voltage UN	160 V
Nominal current IN	6 A

IECEE CB Scheme	http://www.iecee.org/	DE1-59151-M1

Nominal voltage UN	160 V
Nominal current IN	6 A

cULus Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19920306

	B	C
Nominal voltage UN	150 V	50 V
Nominal current IN	6 A	6 A