

DMCV 0,5/ 4-G1SHL-2,54P20THR24 - 1145419

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>)

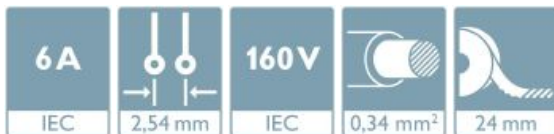


PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.34 mm², number of positions: 4, pitch: 2.54 mm, color: black, contact surface: Gold, solder pin [P]: 2 mm

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

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 136031
GTIN	4063151136031
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	4

Electrical parameters

Nominal current	6 A
-----------------	-----

DMCV 0,5/ 4-G1SHL-2,54P20THR24 - 1145419

Technical data

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]	14.74 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

DMCV 0,5/ 4-G1SHL-2,54P20THR24 - 1145419

Technical data

Packaging information

Denomination packing units	Pcs.
[W] tape width	24 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	3.4 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
	Following 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

DMCV 0,5/ 4-G1SHL-2,54P20THR24 - 1145419

Technical data

Durability tests (B)

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

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	2
Conductor cross section	0.34 mm ²
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

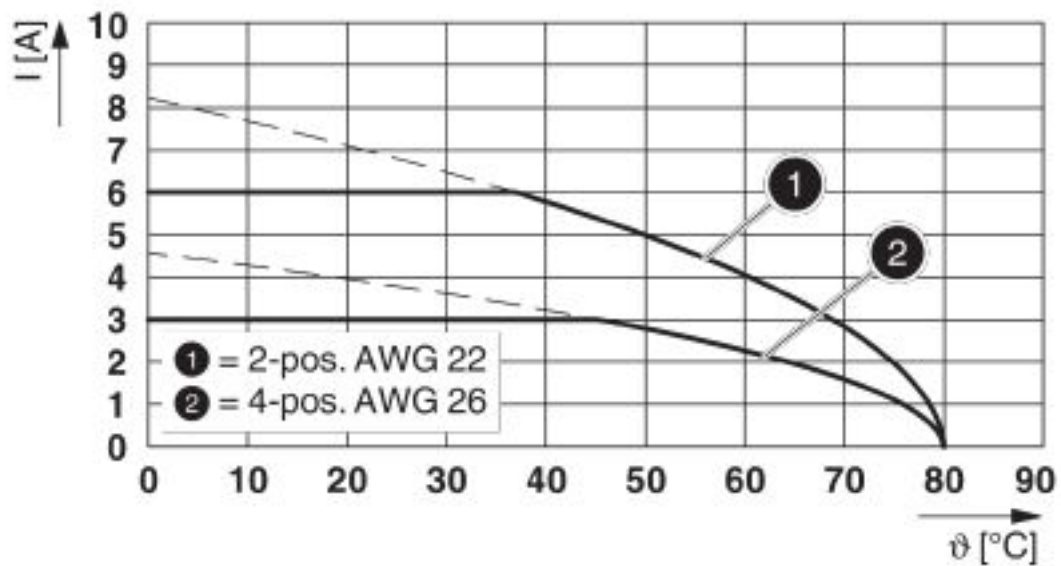
Vibration test

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

DMCV 0,5/ 4-G1SHL-2,54P20THR24 - 1145419

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 / IECCE CB Scheme / cULus Recognized

Ex Approvals

Approval details

DMCV 0,5/ 4-G1SHL-2,54P20THR24 - 1145419

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
		Nominal current IN	6 A