

MCO 1,5/ 3-G1R-3,5 KMGY - PCB header



2278322

<https://www.phoenixcontact.com/us/products/2278322>

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 documentation. Our general terms of use for downloads are valid.



PCB headers, nominal cross section: 1.5 mm², color: light grey, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: MCO 1,5/..-G1R, pitch: 3.5 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, locking: without, type of packaging: packed in cardboard, Product with pin output on right side

Your advantages

- Plug-in direction orthogonal to the PCB

Commercial data

Item number	2278322
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AC08
Product key	ACHADB
Catalog page	Page 233 (C-1-2013)
GTIN	4046356292665
Weight per piece (including packing)	1.498 g
Weight per piece (excluding packing)	1.4 g
Customs tariff number	85366930
Country of origin	PL

MCO 1,5/ 3-G1R-3,5 KMGY - PCB header



2278322

<https://www.phoenixcontact.com/us/products/2278322>

Technical data

Product properties

Type	Header perpendicular to the PCB
Product type	PCB headers
Product family	MCO 1,5/..-G1R
Number of positions	3
Pitch	3.5 mm
Number of connections	3
Number of rows	1
Mounting flange	without
Number of potentials	3
Pin layout	Linear pinning

Electrical properties

Nominal current I_N	8 A
Nominal voltage U_N	300 V
Degree of pollution	3
Contact resistance	1.6 mΩ
Rated voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

Material specifications

Material data - contact

Contact material	Cu alloy
Surface characteristics	tin-plated

Material data - housing

Color (Housing)	light grey (7035)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775

MCO 1,5/ 3-G1R-3,5 KMGY - PCB header



2278322

<https://www.phoenixcontact.com/us/products/2278322>

Temperature for the ball pressure test according to EN 60695-10-2	125 °C
---	--------

Dimensions

Dimensional drawing	
Pitch	3.5 mm
Width [w]	9.95 mm
Height [h]	15.3 mm
Length [l]	14.55 mm
Solder pin length [P]	3.5 mm
Pin dimensions	0.8 x 0.8 mm

PCB design

Hole diameter	1.2 mm
---------------	--------

Mechanical tests

Visual inspection

Specification	IEC 60512-1-1:2002-02
Result	Test passed

Dimension check

Specification	IEC 60512-1-2:2002-02
Result	Test passed

Resistance of inscriptions

Specification	IEC 60068-2-70:1995-12
Result	Test passed

Polarization and coding

Specification	IEC 60512-13-5:2006-02
Result	Test passed

Contact holder in insert

Specification	IEC 60512-15-1:2008-05
Contact holder in insert Requirements >20 N	Test passed

Insertion and withdrawal forces

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	4 N

2278322

<https://www.phoenixcontact.com/us/products/2278322>

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	5

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

Air clearances and creepage distances |

Insulating material group	I
Rated insulation voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	2 mm
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	0.8 mm
Rated insulation voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	1.6 mm

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Sweep speed	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R ₁	1.6 mΩ
Contact resistance R ₂	1.6 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle

MCO 1,5/ 3-G1R-3,5 KMGY - PCB header



2278322

<https://www.phoenixcontact.com/us/products/2278322>

Thermal stress	105 °C/168 h
Power-frequency withstand voltage	1.39 kV

Ambient conditions

Ambient temperature (operation)	-40 °C ... 105 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C ... 55 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	packed in cardboard
Outer packaging type	Carton

MCO 1,5/ 3-G1R-3,5 KMGY - PCB header



2278322

<https://www.phoenixcontact.com/us/products/2278322>

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC002637
----------	----------

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

MCO 1,5/ 3-G1R-3,5 KMGY - PCB header



2278322

<https://www.phoenixcontact.com/us/products/2278322>

Environmental product compliance

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

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com