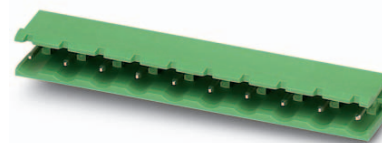


Order No.: 1766123

Type: GMSTB 2,5/ 2-G-7,62

Header



The figure shows a 10-position version of the product

1 Main features



- | | | | |
|-------------------------|---------------------|------------------------|---------------------|
| • Number of positions | 2 | • Nominal current | 12 A |
| • Nominal cross section | 2.5 mm ² | • Nominal voltage | 630 V |
| • Color | green | • Connection direction | 0 ° |
| • Pitch | 7.62 mm | • Type of packaging | packed in cardboard |
| • Mounting type | Wave soldering | | |

2 Your advantages

- ✓ Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- ✓ Items that can be aligned in various pitches support flexible and space-saving PCB assembly
- ✓ Well-known mounting principle allows worldwide use
- ✓ Larger pitch for increased voltage requirements
- ✓ Plug-in direction parallel to the PCB



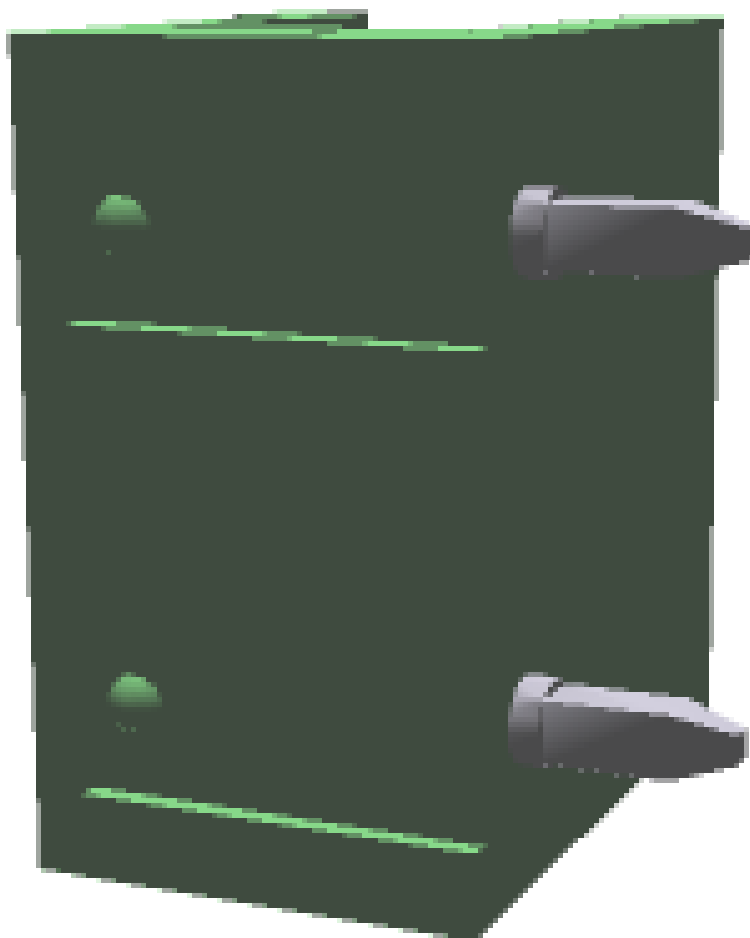
Make sure you always use the latest documentation.
It can be downloaded at: phoenixcontact.net/product/1766123

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1766123 GMSTB 2,5/ 2-G-7,62

4 3D model in PDF can be activated (Acrobat Reader only)



1766123 GMSTB 2,5/ 2-G-7,62**5 Item properties**

Order No.	1766123
Type	GMSTB 2,5/ 2-G-7,62
Type of contact	Male connector
Range of articles	GMSTB 2,5/...G
Pitch	7.62 mm
Number of positions	2
Locking	without
Mounting type	Wave soldering
Pin layout	Linear pinning

5.1 Material data

Material of metal parts	
Note	WEEE/RoHS-compliant, whisker-free acc. to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface contact area	Ni 1 µm ... 3 µm , Sn 3 µm ... 5 µm
Soldering area surface	Ni 1 µm ... 3 µm , Sn 3 µm ... 5 µm
Surface characteristics	Tin-plated
Insulating material data	
Insulating material	PA
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Color	green (6021)
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

6 Dimensions**6.1 Dimensions for the product**

Length	12 mm
Width	13.44 mm
Height (without solder pin)	8.6 mm
Total height	11.8 mm
Solder pin [P]	3.2 mm
Dimension a	7.62 mm

6.2 Dimensions for PCB design

Hole diameter	1.4 mm
Pin dimensions	1,0 x 1,0

1766123 GMSTB 2,5/ 2-G-7,62

7 Series drawing

8 Packaging information

Type of packaging	packed in cardboard
Pieces per package	50

9 Application

9.1 Temperature limit values

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C (dependent on the derating curve)

1766123 GMSTB 2,5/ 2-G-7,62**10 Mechanical tests**

Mechanical test group A	
Specification	IEC 61984:2008-10
Visual test	Test passed
Specification	IEC 60512-1-1:2002-02
Dimensional test	Test passed
Specification	IEC 60512-1-2:2002-02
Resistance of marking	Test passed
Specification	IEC 60068-2-70:1995-12
Insertion and withdrawal force	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
Polarization and coding	Test passed
Specification	IEC 60512-13-5:2006-02
Test force	20 N
Contact retention in insert	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	39 N

1766123 GMSTB 2,5/ 2-G-7,62**11 Electrical tests****11.1 Electrical data**

Rated current / conductor cross section	12 A / 2.5 mm ²
Rated insulation voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
Contact resistance	1.6 mΩ
Degree of pollution	2

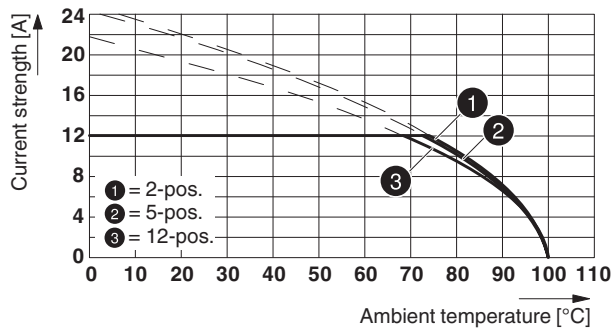
11.2 Air and creepage distances

Component	Header		
Specification	IEC 60664-1:2007-04		
Mains type	unearthed mains		
Insulating material group	I		
Comparative tracking index (IEC 60112:2003-01)	CTI 600		
Rated insulation voltage	400 V	630 V	630 V
Rated surge voltage	6 kV	6 kV	6 kV
Degree of pollution	3	2	2
Overvoltage category	III	III	II
Minimum clearance case A (inhomogeneous field)	5.5 mm	5.5 mm	5.5 mm
Minimum value of the creepage path requirement in acc. with table	6.3 mm	5.5 mm	5.5 mm

1766123 GMSTB 2,5/ 2-G-7,62

12 Current carrying capacity/derating curves

Specification	IEC 61984:2008-10
Note	Representation based on IEC 60512-5-2:2002-02
Reduction factor	0.8
Number of positions	See diagram
Conductor cross section	2.5 mm ²
Note	

Type: FRONT-GMSTB 2,5/...-ST-7,62 with GMSTB 2,5/...-G-7,62

1766123 GMSTB 2,5/ 2-G-7,62

13 Environmental and durability tests


13.1 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	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis


14 Classification for connectors


Specification	IEC 61984:2008-10
Main features	Connectors without switching capacity (COC)
Construction form	Fixed connectors
Strain relief elements	without strain relief
Protection against electric shock	Not encapsulated - touch-proof when inserted
Protection class	
Protective conductor	without PE
Lock	no

15 Approvals


CSA 				
Use group	B	D		
mm ² /AWG/kcmil				
Voltage	300 V	300 V		
Current	10 A	10 A		

UL Recognized 				
Use group	B	D		
mm ² /AWG/kcmil				
Voltage	300 V	300 V		
Current	15 A	10 A		

VDE Gutachten mit Fertigungsüberwachung 				
mm ² /AWG/kcmil				
Voltage	400 V			
Current	12 A			

cUL Recognized 				
Use group	B	D		
mm ² /AWG/kcmil				
Voltage	300 V	300 V		
Current	15 A	10 A		

1766123 GMSTB 2,5/ 2-G-7,62


IECEE CB Scheme 

mm²/AWG/kcmil

Voltage	400 V			
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Current	12 A			
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EAC 

cULus Recognized 

1766123 GMSTB 2,5/ 2-G-7,62**16 Commercial Data**

Order No.	1766123
Type	GMSTB 2,5/ 2-G-7,62
Pieces per package	50
Net weight	0.961 g
GTIN	4017918032142
Customs tariff number	Information that applies locally, see link on page 1
Country of origin	Information that applies locally, see link on page 1

17 corresponding plugs

Order No.	Type
1766990	GMSTB 2,5/ 2-ST-7,62
1806119	FRONT-GMSTB 2,5/ 2-ST-7,62
1823066	GMSTBP 2,5/ 2-ST-7,62
1832413	GMVSTBW 2,5/ 2-ST-7,62
1832523	GMVSTBR 2,5/ 2-ST-7,62
1939633	GFKC 2,5/ 2-ST-7,62

18 Accessories

Description	Order No.	Type
Keying cap, for forming sections, plugs onto header pin, green insulating material	1755477	MSTB-BL
Mounting flange, for fixing both ends of the header onto the PCB, green insulating material, with M 2 x 14 screws and nuts.	1759981	MSTB-BF
	0804549	SK 7,62/3,8:FORTL.ZAHLEN
Coding section, inserted into the recess in the header or the inverted plug, red insulating material	1734401	CR-MSTB