

## Feed-through header - GMSTBO 2,5 HV/ 2-GR-7,25 THR - 2199760

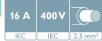
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PCB headers, nominal current: 16 A, rated voltage (III/2): 630 V, nominal cross section: 2.5 mm<sup>2</sup>, number of positions: 2, pitch: 7.25 mm, color: black, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.1 mm, Product with pin output on right side

### Your advantages

- 2 and 3 positions suitable for 17.5/35 mm and 22.5/45 mm housing width
- Suitable for ME/ME MAX electronics housing
- Orthogonal screw/plug-in connection
- Delivery form: box packaging in bulk or tape-on-reel packing for automated mounting
- 7.25 mm pitch for unlimited 600 V UL approval
- THR solderable
- Suitable for reflow soldering processes



### Key Commercial Data

Packing unit	50 pc
Minimum order quantity	50 pc
GTIN	 4 046356 495325
GTIN	4046356495325

### Technical data

#### Item properties

Brief article description	Feed-through header
Type of contact	Male connector
Range of articles	GMSTBO 2,5 HV
Pitch	7.25 mm
Number of positions	2
Mounting type	THR soldering
Pin layout	Linear pinning
Locking	without

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## Technical data

### Item properties

Number of levels	1
Number of connections	2
Number of potentials	2

### Electrical parameters

Nominal current	16 A
Nom. voltage	400 V
Rated voltage	400 V
Rated voltage (III/2)	630 V
Rated voltage (II/2)	630 V
Rated surge voltage (III/3)	6 kV
Rated surge voltage (III/2)	6 kV
Rated surge voltage (II/2)	6 kV

### Material data - contact

Contact material	Cu alloy
Surface characteristics	Tin-plated

### 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

Length [ l ]	15.65 mm
Width [ w ]	14.95 mm
Height [ h ]	16.84 mm
Pitch	7.25 mm
Solder pin [P]	2.1 mm
Pin spacing	7.25 mm
Pin dimensions	1 x 1 mm

### Dimensions for PCB design

Hole diameter	1.5 mm
Pin spacing	7.25 mm

### Packaging information

Pieces per package	50
Denomination packing units	Pcs.

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C

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## Technical data

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)
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### Termination and connection method

Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

### Pull-out test

Pull-out test	IEC 60999-1:1999-11
Conductor cross section / conductor type / tensile force	0.2 mm <sup>2</sup> / solid / > 10 N
	0.2 mm <sup>2</sup> / flexible / > 10 N
	4 mm <sup>2</sup> / solid / > 60 N
	2.5 mm <sup>2</sup> / flexible / > 50 N

### Mechanical tests according to standard

Test specification	IEC 61984
Visual inspection	IEC 60512-1-1:2002-02
Dimension check	IEC 60512-1-2:2002-02
Resistance of inscriptions	IEC 60068-2-70:1995-12
Insertion and withdrawal force	IEC 60512-13-2:2006-02
No. of cycles	25
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	3.5 N
Polarization and coding	IEC 60512-13-5:2006-02
Contact holder in insert	IEC 60512-15-1:2008-05
Test force per pos.	20 N

### Current carrying capacity / derating curves

Specification	IEC 61984:2008-10
Reduction factor	0.8
Note	Representation based on IEC 60512-5-2:2002-02
	For number of positions, see diagram

### Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	5 N
Withdraw strength per pos. approx.	3.5 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

### Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R <sub>1</sub>	1.3 mΩ
Insertion/withdrawal cycles	25
Contact resistance R <sub>2</sub>	1.5 mΩ

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### Technical data

#### Durability tests (B)

Impulse withstand voltage at sea level	7.3 kV
Power-frequency withstand voltage	3.31 kV
Insulation resistance, neighboring positions	> 10 TΩ

#### Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	3
Conductor cross section	2.5 mm <sup>2</sup>
Test current	16 A DC
Upper limiting temperature requirements <100 °C	Test passed

#### Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	3.31 kV

#### Environmental and durability tests (E)

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

#### Standards and Regulations

Connection in acc. with standard	EN-VDE
	CUL
Flammability rating according to UL 94	V0

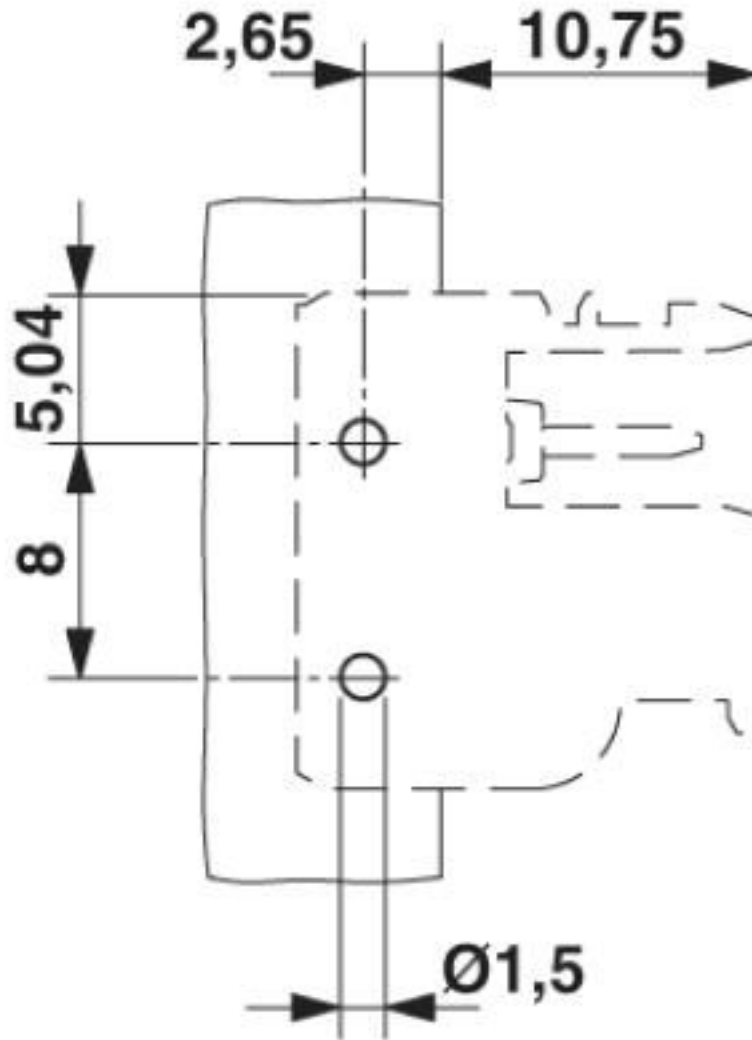
#### Environmental Product Compliance

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

### Drawings

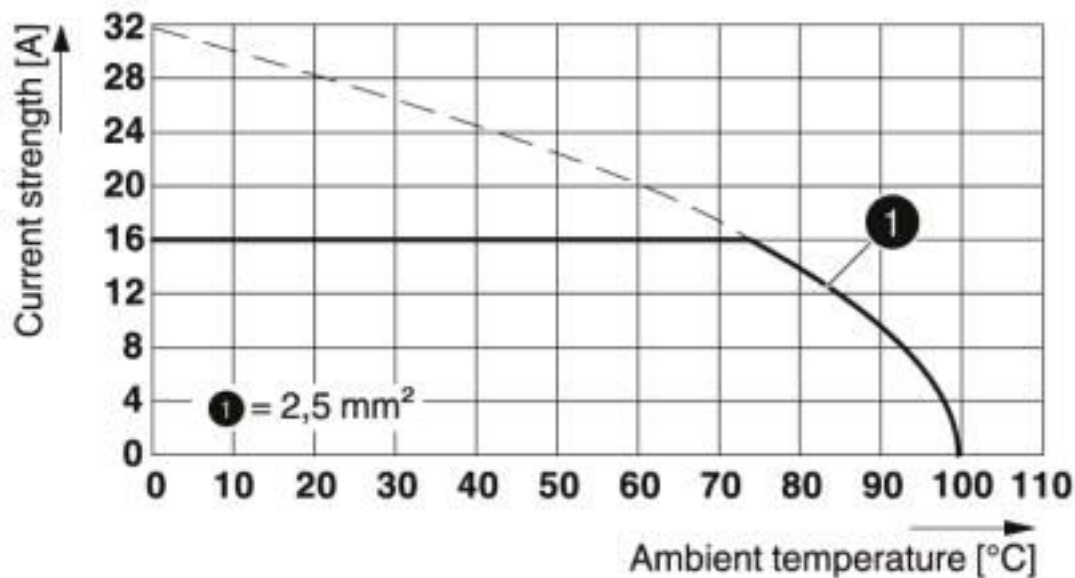
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Drilling diagram



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Diagram



Type: GMSTBT 2,5 HV/...-ST-7,25 GY7035 with GMSTBO 2,5 HV/...-GR(L)-7,25 THR

## Classifications

eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440402
eCl@ss 8.0	27440402
eCl@ss 9.0	27440402

ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002637
ETIM 5.0	EC002637
ETIM 6.0	EC002637
ETIM 7.0	EC002637

UNSPSC

UNSPSC 6.01	31261501
UNSPSC 7.0901	31261501
UNSPSC 11	31261501
UNSPSC 12.01	31261501

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## Classifications

### UNSPSC

UNSPSC 13.2	39121409
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

## Approvals

### Approvals

#### Approvals

CCA / IEC EE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

#### Ex Approvals

### Approval details

CCA	CCA/DE1 34305/A1
Nominal voltage UN	630 V
Nominal current IN	16 A

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-52506/A1
Nominal voltage UN	630 V		
Nominal current IN	16 A		

VDE Gutachten mit Fertigungsüberwachung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40037875
Nominal voltage UN	630 V		
Nominal current IN	16 A		

EAC		B.01687
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### Approvals

cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E60425-19931013
	B	C	D
Nominal voltage UN	300 V	150 V	300 V
Nominal current IN	16 A	16 A	10 A

### Accessories

#### Necessary add-on products

Printed-circuit board connector - GMSTBT 2,5 HV/2-ST-7,25 GY7035 - 2199757



PCB connector, number of positions: 2, pitch: 7.25 mm, color: light gray, contact surface: Tin

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