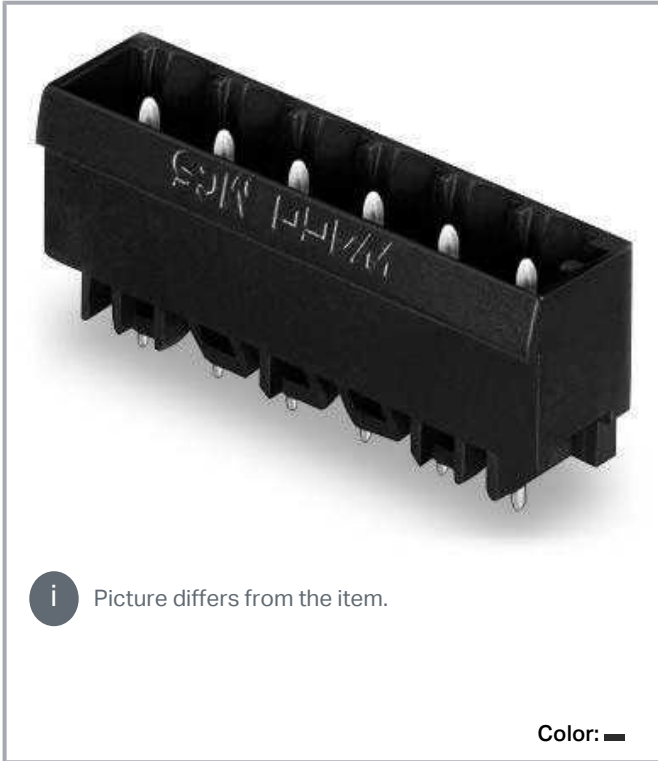


Data sheet | Item number: 231-139/001-000/105-604

Male header; 9-pole; THR; 1.0 x 1.0 mm solder pin; straight; pin spacing 5 mm; black



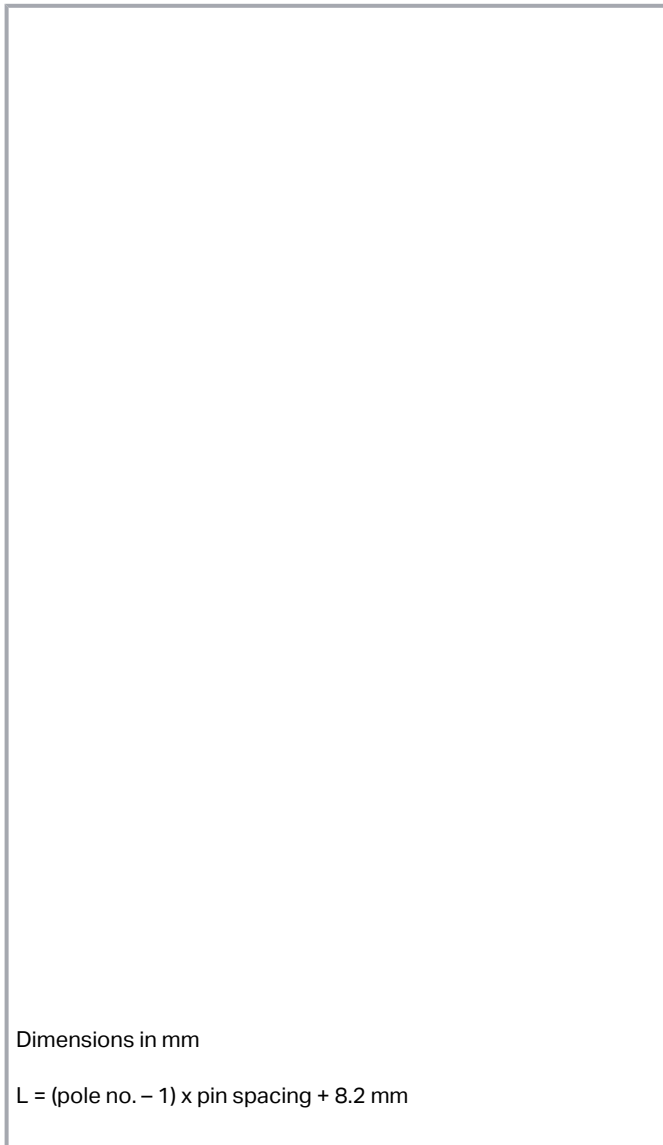
www.wago.com/231-139_001-000_105-604



Subject to changes. Please also observe the further product documentation!

WAGO Corporation
Germantown, WI 53022
Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222
Email: info.us@wago.com | Web: www.wago.us

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Item description

- THR male headers for reflow soldering in SMT applications
- Available in tape-and-reel packaging for automated pick-and-place PCB assembly
- Also available in bulk packaging for manual placement
- Male headers may be mounted horizontally or vertically
- With coding fingers

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Data Notes

Safety information 1

The *MCS – MULTI CONNECTION SYSTEM* includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected /disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

Variants:

Other pole numbers
Gold-plated or partially gold-plated contact surfaces
Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>

Electrical data

IEC Approvals

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	320 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Nominal voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
Rated current	12 A
Legend (ratings)	(III / 2) \triangleq Overvoltage category III / Pollution degree 2

UL Approvals

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	10 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A

Ratings per UL

Rated voltage UL 1977	600 V
Rated current UL 1977	10 A

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CSA Approvals

Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	10 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

Connection data

Total number of potentials	9
Number of connection types	1
Number of levels	1

Connection 1

Number of poles	9
-----------------	---

Physical data

Pin spacing	5 mm / 0.197 inch
Width	48.2 mm / 1.898 inch
Height	14.4 mm / 0.567 inch
Height from the surface	12 mm / 0.472 inch
Depth	8.4 mm / 0.331 inch
Solder pin length	2.4 mm
Solder pin dimensions	1 x 1 mm
Plated through-hole diameter (THR)	1.4 ^(+0.1) mm

Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismating protection	No
Mating direction to the PCB	90°
Locking of plug-in connection	Without

PCB contact

PCB Contact	THR
Solder pin arrangement	over the entire male connector (in-line)

Subject to changes. Please also observe the further product documentation!

Number of solder pins per potential	1
-------------------------------------	---

Material data

Color	black
Material group	I
Insulation material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E _{Cu})
Contact plating	tin-plated
Fire load	0.051 MJ
Weight	2.7 g

Environmental requirements


Limit temperature range	-60 ... +100 °C
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Commercial data

Product Group	3 (Multi Conn. System)
PU (SPU)	100 Stück
Packaging type	box
Country of origin	PL
GTIN	4050821013648
Customs tariff number	85366990990

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CB DEKRA Certification B.V.	IEC 61984	NL-39756
	CSA DEKRA Certification B.V.	C22.2	1466354

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS	-	19-



Subject to changes. Please also observe the further product documentation!



American Bureau of Shipping

HG1869876-PDA

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 1059	E45172
	UR Underwriters Laboratories Inc.	UL 1977	E45171

Counterpart




Item no. 231-109/026-000

Female plug; 9-pole; 12 AWG max; pin spacing 5 mm; 1 conductor per pole; gray

www.wago.com/231-109/026-000

Optional accessories

Coding			
Intermediate plate			
	Item no.: 231-500 Spacer; for formation of groups; light gray		www.wago.com/231-500
Coding			
	Item no.: 231-129 Coding key; snap-on type; light gray		www.wago.com/231-129

Downloads

Documentation

Additional Information

Technical explanations	2019 Apr 3	pdf 2.0 MB	Download
THR Soldering Process		pdf 548.2 kB	Download

Subject to changes. Please also observe the further product documentation!

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CAD files

CAD data

2D/3D Models 231-139/001-000/105-604	URL	Download
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CAE data

EPLAN Data Portal 231-139/001-000/105-604	URL	Download
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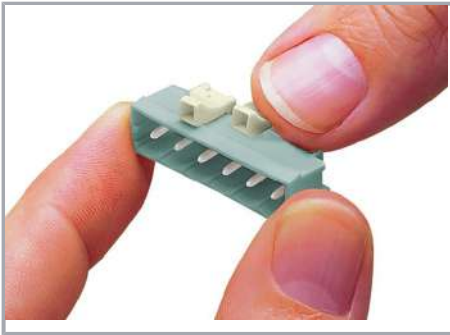
Environmental Product Compliance

Compliance Search

Environmental Product Compliance 231-139/001-000/105-604	URL	Download
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THR male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 5 mm; 9-pole; black

Installation Notes



Coding a male header – fitting coding key(s).

Product family

MCS MIDI Classic

[Show all products from the family](#)

Subject to changes. Please also observe the further product documentation!