

Product Data Sheet

Colibri Receptacle 220,
Part No. 402-51101-51



COM 
Express®

Illustration similar



Parallel



SMT



High Density



High Speed

- for all board-to-board distances
- 220 contacts
- termination technology SMT
- pitch 0.5 mm
- data transfer rate up to 16+ Gbit/s
- for PCIe Gen4



» to product on www.ept.de



» to product group Colibri - 0.5 mm SMT

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Technical Specifications

Basics

Specification	PICMG® COM.0 Rev 3.1
No. of Contacts	220
Termination Technology	SMT
Board-to-Board Distance	5 mm & 8 mm
Operating Temperature Range	-40°C to +125°C

Material

Insulator Material	LCP, UL 94 V-0
CTI value <i>IEC 60112</i>	175
Contact Material	Copper alloy
Plating	Au over Ni
Termination area	Au flash over Ni

Mechanical

Pitch	0.5 mm
Mating Force per Pin	max. 0.9 N
Separating Force per Pin	min. 0.1 N
Durability	30 mating cycles
Coplanarity	max. 0.1 mm

Electrical

Operational Current	max. 0.5 A
Operational Voltage	50 VAC
Contact Resistance	max. 75 mΩ
Clearance and Creepage	≥ 0.2 mm
Insulation Resistance	> 100 MΩ
Test Voltage	200 VAC
Data Transfer Rate	up to 16 Gbit/s

Processing

Soldering Temperature	260°C per J-STD-020
MSL	1
Assembly	Pick and Place

Approval / Compliance

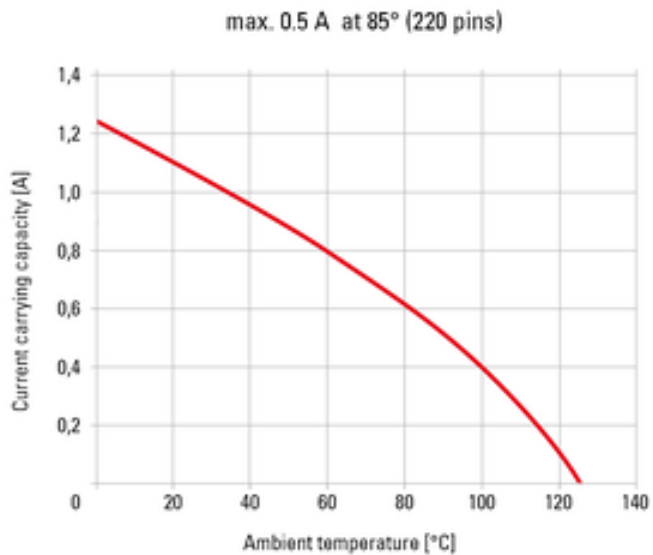
UL file	E130314
Environment	RoHS compliant

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Derating Diagram



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Modifications

Available on request

- different number of contacts
- alternative contact surfaces

Drawings

Component data in 2D and 3D format you can download here:

[» PDF](#)

[» 3D IGES](#)

[» 3D STEP](#)

[» 3D PDF](#)