

Product Data Sheet

Colibri Plug 16+ 80, 5 mm,
Part No. 401-51603-51

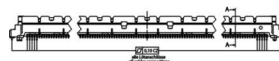
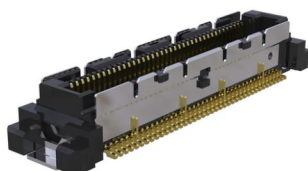


Illustration similar



Parallel



SMT



High Density



High Speed

- for 5 mm board-to-board distance
- effective mating length up to +0.6 mm
- number of positions: 80
- termination technology SMT
- pitch: 0.5 mm
- data rate: 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. 3.0
No. of Contacts	80
Termination Technology	SMT
Board-to-Board Distance	5 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	gold over nickel
Termination area	Au flash over Ni

Mechanical

Pitch	0.5 mm
Mating Force per Pin	max. 0.9 N
Separating Force per Pin	at least 0.1 N
Durability	30 mating cycles
Coplanarity	max. 0.1 mm
Overmating Distance	0.6 mm
Center offset in the x direction	± 0.4 mm
Center offset in the y direction	± 0.19 mm
Axial offset when mated (x/y)	± 0.1 mm (8 mm height) / ± 0.115 mm (5 mm height)
Angular offset in the x direction	± 2°

Electrical

Operational Current	max. 0.5 A
Operational Voltage	50 VAC
Test Voltage	200 VAC
Contact Resistance	max. 75 mΩ
Clearance and Creepage	≥ 0.15 mm
Insulation Resistance	> 100 MΩ
Data Transfer Rate	16 Gbit/s

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Technical Specifications

Processing

Soldering Temperature 260°C according to J-STD-020

MSL 1

Assembly Pick and Place

Approval / Compliance

UL file E130314

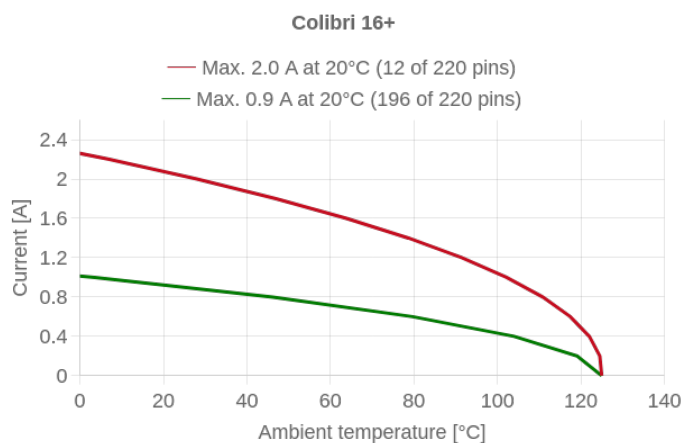
Environment RoHS compliant

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Derating Diagram



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Options

for the connector with pick & place cap use part number 401-51613-51

Modifications

Available on request

- other stack heights
- alternative contact coatings

Drawings

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

[» PDF](#)

[» 3D IGES](#)

[» 3D STEP](#)

[» 3D PDF](#)