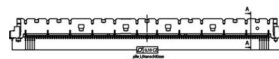
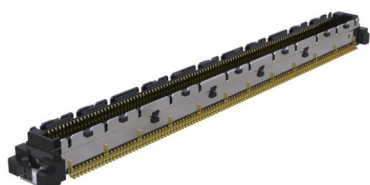


Product Data Sheet

Colibri Plug 16+ 220, 5 mm,
Part No. 401-51103-51



COM 
Express®

Illustration similar



Parallel



SMT



High Density



High Speed

- for 5 mm PCB spacing
- Overlap tolerance up to +0.6 mm
- Number of poles: 220
- SMT Connectivity
- Grid: 0.5 mm
- Data transfer rate of 16+ Gbps for PCIe Gen4



» to product on www.ept.de



» to product group Colibri® - 0.5 mm SMT

Product Data Sheet

Colibri Plug 16+ 220, 5 mm,
Part No. 401-51103-51



Technical Specifications

Basics

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

Material

Insulator Material	LCP, UL 94 V-0
CTI value <i>IEC 60112</i>	175
Contact Material	copper alloy
Plating	Above Ni
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 insertion 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

Product Data Sheet

Colibri Plug 16+ 220, 5 mm,
Part No. 401-51103-51



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

Product Data Sheet

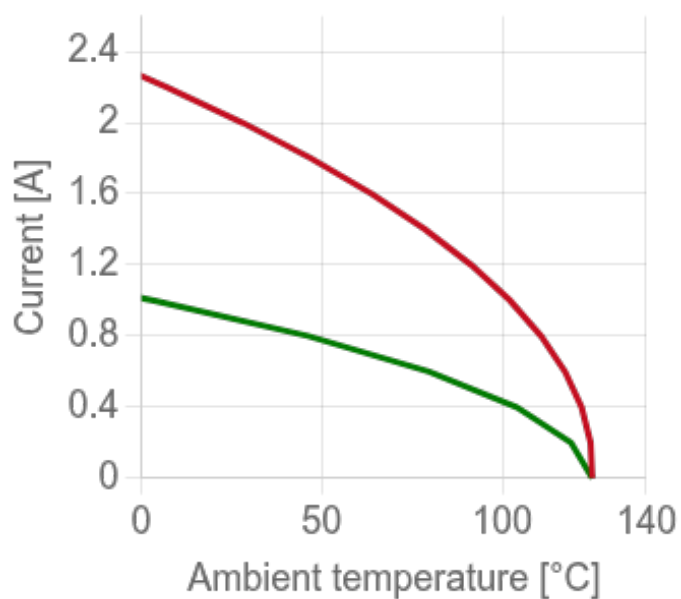
Colibri Plug 16+ 220, 5 mm,
Part No. 401-51103-51



Derating Diagram

Colibri 16+

- Max. 2.0 A at 20°C (12 of 220 pins)
- Max. 0.9 A at 20°C (220 of 220 pins)



Product Data Sheet

**Colibri Plug 16+ 220, 5 mm,
Part No. 401-51103-51**



Options

for the connector with pick & place cap use part number 401-51153-51

Modifications

Available on request

- other pole counts
- alternative contact coatings

Drawings

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

[» PDF](#)

[» 3D IGES](#)

[» 3D STEP](#)

[» 3D PDF](#)