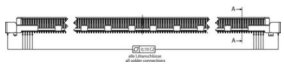
Product Data Sheet

Colibri Receptacle 160,
Part No. 402-51301-51



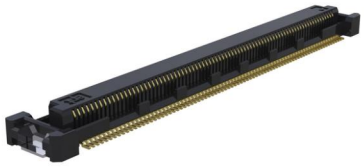


Illustration similar

Parallel | SMT | High Density | High Speed

- for all PCB pitch sizes
- number of positions: 160
- termination technology SMT
- pitch: 0.5 mm
- data rate up to 25+ Gbit/s
- for PCIe Gen 4

» to product on www.ept.de

» to product group Colibri - 0.5 mm SMT

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Part No. 402-51301-51

Technical Specifications

Basics

No. of Contacts	160
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 *IEC 60112*	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
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	≥ 0.2 mm
Insulation Resistance	> 100 MΩ
Data Transfer Rate	up to 25+ Gbit/s

Processing

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

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Technical Specifications

Approval / Compliance

UL file	E130314
Environment	RoHS compliant

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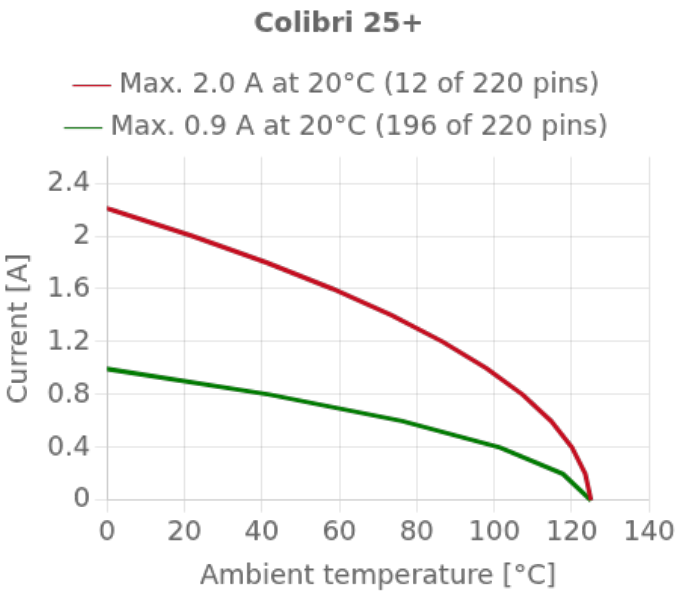
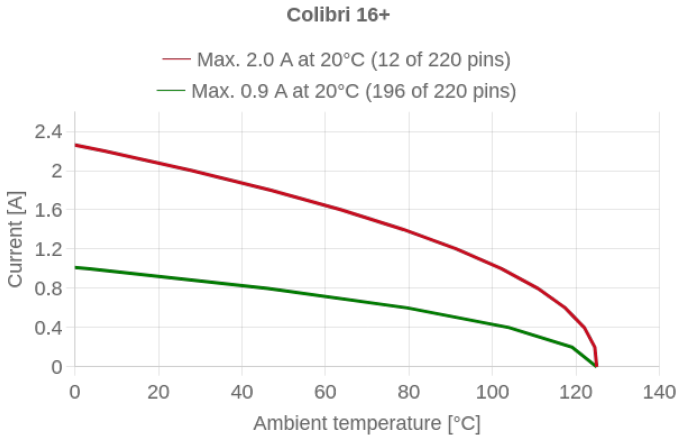
Derating Diagram





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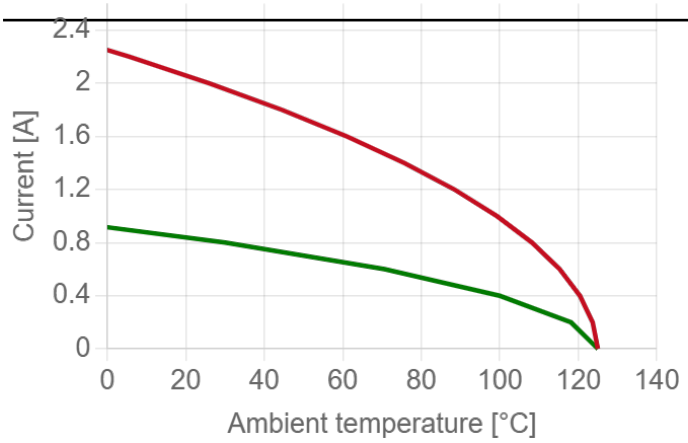

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Modifications

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

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