Product Data Sheet

Colibri Plug 16+ 440, 8 mm, Part No. 401-55503-51

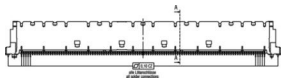

Illustration similar

Parallel

SMT

High Density

High Speed

- for 8 mm PCB spacing
- Overlap tolerance up to +0.6 mm
- Number of poles: 440
- 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

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Technical Specifications

Basics

Specification	PICMG® COM.0 Rev. 3.1
No. of Contacts	440
Termination Technology	SMT
Board-to-Board Distance	8 mm
Operating Temperature Range	-40°F to +125°F

Material

Insulator Material	LCP, UL 94 V-0
CTI value *IEC 60112*	125
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
Contact Resistance	max. 75 mΩ
Clearance and Creepage	≥ 0.15 mm
Insulation Resistance	> 100 MΩ
Test Voltage	200 VAC
Data Transfer Rate	16 Gbit/s

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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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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