

har-flex HD-Card Edge 60p PL1 SAMPLE



Image is for illustration purposes only. Please refer to product description.

| | |
|--------------------|---|
| Part number | 15 03 060 2001 333 |
| Specification | har-flex HD-Card Edge 60p PL1 SAMPLE |
| HARTING eCatalogue | https://harting.com/15030602001333 |

Identification

| | |
|----------------|--|
| Category | Connectors |
| Series | har-flex® |
| Identification | HD-Card Edge |
| Element | Connector |
| Features | The sample packaging is not suitable for automated assembly. |

Version

| | |
|--------------------|--|
| Termination method | Reflow soldering termination (SMT) |
| Connection type | Motherboard to daughtercard Mezzanine |
| Number of contacts | 60 |
| Pack contents | Sample |

Technical characteristics

| | |
|------------------------------------|---|
| Contact rows | 2 |
| Contact spacing (termination side) | 0.8 mm |
| Contact spacing (mating side) | 0.8 mm |
| Data rate | 25 Gbit/s |
| Clearance distance | ≥0.2 mm Backplane ≥0.53 mm Connector ≥0.1 mm Daughtercard |
| Creepage distance | ≥0.2 mm Backplane ≥0.53 mm Connector ≥0.1 mm Daughtercard |
| Limiting temperature | -55 ... +125 °C |



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Technical characteristics

| | |
|----------------------------------|-------------------------------------|
| Insertion force | ≤40 N |
| Withdrawal force | ≥12 N |
| Performance level | 1 |
| Mating cycles | ≥200 |
| Isolation group | IIIa (175 ≤ CTI < 400) |
| Moisture Sensitivity Level (MSL) | 1 acc. to ECA/IPC/JEDEC J-STD-020D |
| Process Sensitivity Level (PSL) | R0 acc. to ECA/IPC/JEDEC J-STD-020D |
| Coplanarity of contacts | ≤0.1 mm |

Material properties

| | |
|---|--|
| Material (insert) | Liquid crystal polymer (LCP) |
| Colour (insert) | Black |
| Material (contacts) | Copper alloy |
| Surface (contacts) | Noble metal over Ni Mating side Sn over Ni Termination side |
| Material flammability class acc. to UL 94 | V-0 |
| RoHS | compliant |
| ELV status | compliant |
| China RoHS | e |
| REACH Annex XVII substances | Not contained |
| REACH ANNEX XIV substances | Not contained |
| REACH SVHC substances | Not contained |
| California Proposition 65 substances | Not contained |

Commercial data

| | |
|--------------------------------|--|
| Packaging size | 1 |
| Country of origin | China |
| European customs tariff number | 85366990 |
| GTIN | 5713140205420 |
| eCl@ss | 27460201 PCB connector (board connector) |
| ETIM | EC002637 |
| UNSPSC 24.0 | 39121415 |



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Data Transmission Protocols

| har-flex HD-Card Edge Family Product Data Rate: 25Gbit/s | | | | |
|---|-------------------------|--------------------------------|--------------------------------|-------------------------------|
| Protocol | Serial Data Rate / Pair | Single Interface Short Channel | Double Interface Short Channel | Double Interface Long Channel |
| 400GBASE-KR4 | 56 Gbit/s | Not recommended | Not recommended | Not recommended |
| 100GBASE-KR4 | 25 Gbit/s | suitable | Not recommended | Not recommended |
| 40GBASE-KR4 | 10 Gbit/s | suitable | suitable | suitable |
| Infiniband HDR | 50 Gbit/s | Not recommended | Not recommended | Not recommended |
| Infiniband HDR | 25.8 Gbit/s | Not recommended | Not recommended | Not recommended |
| Infiniband FDR | 14 Gbit/s | suitable | suitable | suitable |
| PCIe Gen 4 | 16 Gbit/s | suitable | suitable | suitable |
| PCIe Gen 3 | 8 Gbit/s | suitable | suitable | suitable |
| PCIe Gen 2 | 5 Gbit/s | suitable | suitable | suitable |
| USB 3.1 | 5 Gbit/s | suitable | suitable | suitable |
| USB 3.0 | 5 Gbit/s | suitable | suitable | suitable |
| Hypertransport 3 | 5.2 Gbit/s | suitable | suitable | suitable |
| SATA 3.2 | 16 Gbit/s | suitable | suitable | suitable |
| SAS 4.0 | 22.5 Gbit/s | Not recommended | Not recommended | Not recommended |
| SAS 3.0 | 12 Gbit/s | suitable | suitable | suitable |
| SAS 2.0 | 6 Gbit/s | suitable | suitable | suitable |

The protocol recommendations are based on a set of defined channels. For more information please refer to the reference channel descriptions:

https://d33y5j6752j001.cloudfront.net/asset/201312468866/document_ifd9i1f1bd01t6mk6dr9s45u2u