1000BASE-TX GBIC Module RJ-45 100m data range Cisco compatible

\*\*GBIC-, SFP-, XFP-, XENPAK-Transceiver

The tde Small Form Pluggable Optical Transceiver are easy installed for enterprise and telecom applications. The tde SFP modular line provides a fully compatible, highly reliable and volume accessible supply of quality transceiver products with excellent performance for design-in manufacturing and end-user enterprise applications.

\*\*GBIC Modules

\*\*TECHNISCHE\_DATEN

Features
• Up to 1.25GBd bi-directional data links
• Compliant with IEEE 802.3z, IEEE 802.3ab compliant
• Compliant with GBIC Specification Revision 5.5
• SCA-2 Host connector
• Hot Pluggable
• Support 1000BASE-T full duplex default operating mode
• RJ-45 connector
• Auto-sense MDI/MDIX
• Power supply 3.3V/5V
• RoHS Compliance
• Operating temperature range: 0°C to 70°C.

Applications
• 1.25GBd Gigabit Ethernet

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| --- | --- | --- | --- | --- | --- | --- |
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Remarks |
| Data Rate | DR |   |   | 1000 | Mb/sec | IEEE 802.3 |
| Cable Length | CL |   |   | 100 | m | Category 5 UTP |
| Bit Error Rate | BER |   |   | 10−12 |   |   |
| Operating Temperature | TOP | 0 |   | 70 | °C | Case temperature |
| Storage Temperature | TSTO | -40 |   | 85 | °C | Ambient temperature |
| Supply Current | IS |   | 310 | 375 | mA | For electrical power interface |
| Input Voltage | Vcc | 3.15 | 5 | 5.5 | V | Referenced to GND. For electrical power interface |
| Maximum Voltage | VMAX |   |   | 6 | V | For electrical power interface |
| Surge Current | Isurge |   |   | 30 | mA | Hot Plug above steady state current. For electrical power interface |

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| --- | --- | --- | --- | --- | --- | --- |
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Remarks |
| Differential Input Voltage | VINDIFF | 500 |   | 2000 | mV | Differential peak-peak |
| Differential Output Voltage | VOUTDIFF | 370 |   | 2000 | mV | Differential peak-peak |
| Rise/Fall Time (20% − 80%) | TR-F |   | 250 |   | psec |   |
| Tx Input impedance | ZIN |   | 75 |   | ohm | Single ended |
| Rx Output impedance | ZOUT |   | 75 |   | ohm | Single ended |

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| --- | --- | --- | --- | --- |
| Parameter | Symbol | Typ. | Unit | Remarks |
| Line Frequency | FL | 125 | MHz | 5-level encoding |
| Tx Output Impedance − Differential | ZOUT\_T | 100 | Ohm | IEEE standard 802.3. |
| Rx Input Impedance − Differential | ZIN\_RX | 100 | Ohm | IEEE standard 802.3. |

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| --- | --- | --- | --- | --- | --- |
| Parameter | Symbol | Min. | Max. | Unit | Remarks |
| GBIC Output Low | VOL | 0 | 0.5 | V | External 4.7k-10k ohm pull-up to host\_VCC. |
| GBIC Output High | VOH | Host\_VCC – 0.5 | Host\_VCC + 0.3 | V | External 4.7k-10k ohm pull-up to host\_VCC. |
| GBIC Input Low | VIL | 0 | 0.8 | V | External 4.7k-10k ohm pull-up to host\_VCC. |
| GBIC Input High | VIEH | 2 | VCC + 0.3 | V | External 4.7k-10k ohm pull-up to host\_VCC. |