



# 北亿纤通科技有限公司

F-TONE GROUP 集团旗下

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The following optical characteristics are defined over the Recommended Operating Environment unless otherwise specified.

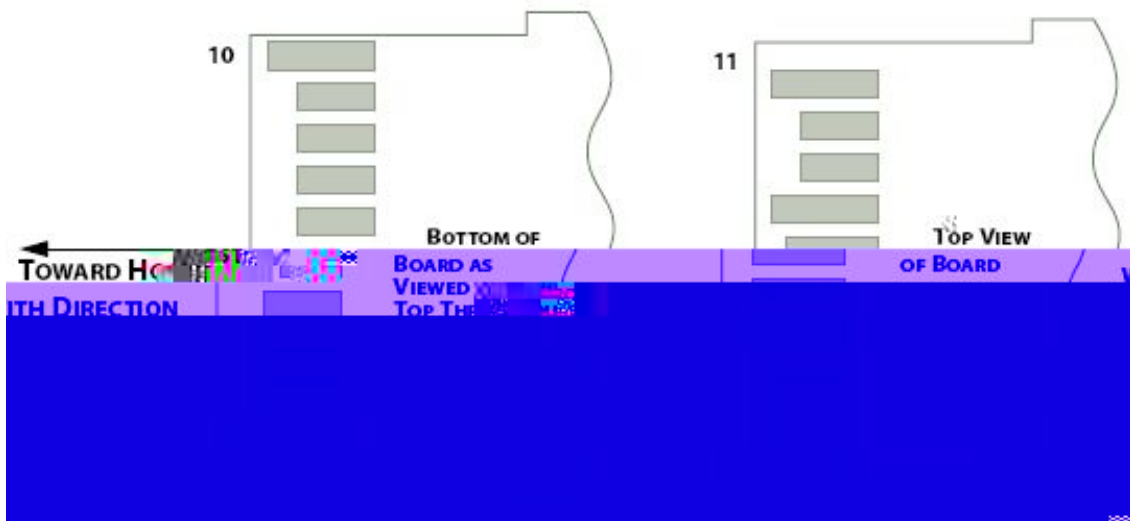
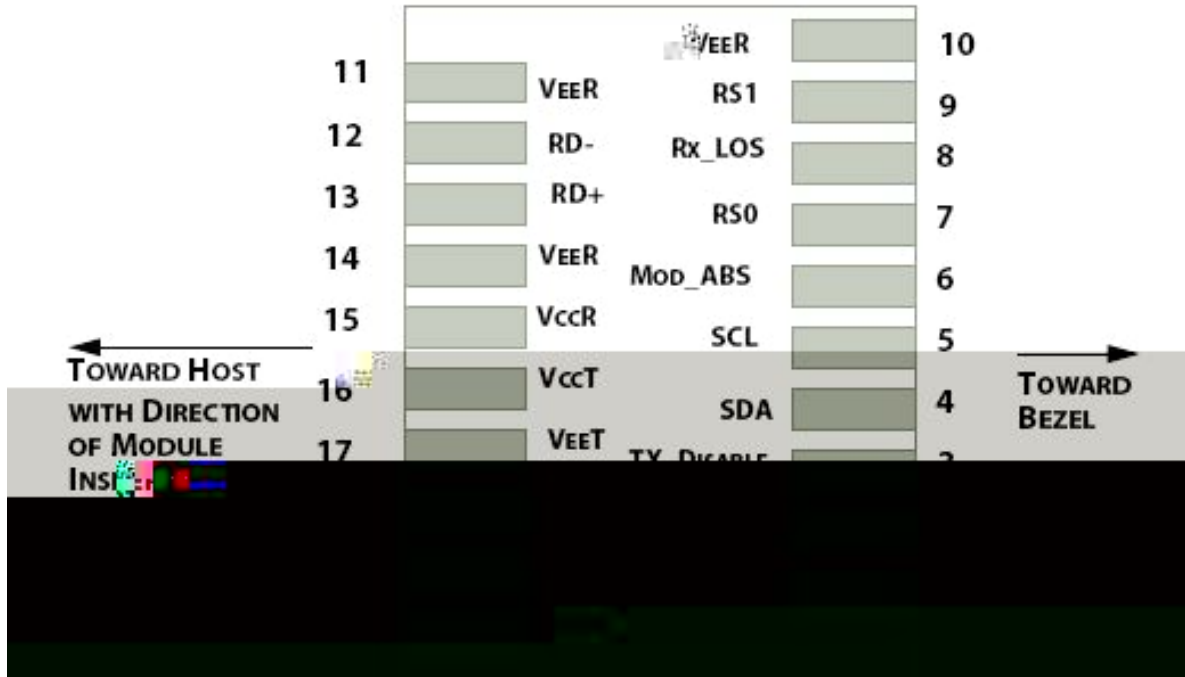
|   |       |            |        |
|---|-------|------------|--------|
| Center wavelength (range)   | nm    | 1260 -1355 |        |
| Side Mode Suppression Ratio (min)   | dB    | 30         |        |
| Launched power  |       |            |        |
| – maximum   | dBm   | +1         |        |
| – minimum   | dBm   | -5         | Notes1 |
| – OMA   | dBm   | -5.2       |        |
| – OMA-TDP (min)   | dBm   | -6.2       |        |
| Transmitter and dispersion penalty  | dB    | 0          | Notes4 |
| Average launch power of OFF transmitter (max)   | dBm   | -30        |        |
| Extinction ratio (min)  | dB    | 3.5        | Notes2 |
| RIN <sub>12</sub> OMA (max)   | dB/Hz | -128       |        |
| Optical Return Loss Tolerance (min)   | dB    | 12         |        |
| Center wavelength (range)   | nm    | 1260-1355  |        |
| Receive overload (max) in average power <sup>1</sup>  | dBm   | 0.5        |        |
| Receive sensitivity (min) in average power <sup>1</sup>   | dBm   | -14.4      | Notes3 |
| Receiver sensitivity (max) in OMA (footnote 2)  | dBm   | -12.6      | Notes3 |
| Receiver Reflectance (max)  | dB    | -12        |        |
| Stressed receiver sensitivity (max) in OMA <sup>2</sup>   | dBm   | -10.3      |        |
| Vertical eye closure penalty (min) <sup>3</sup>   | dB    | 2.2        |        |
| Stressed eye jitter (min) <sup>2</sup>  | Ulp-p | 0.7        |        |
| Receive electrical 3dB upper cutoff frequency (max)   | GHz   | 12.3       |        |
| Receiver power (damage, Max)  | dBm   | 1.5        |        |
| <ol style="list-style-type: none"> <li>1. The optical power is launched into SMF</li> <li>2. Measured with a PRBS 2<sup>31</sup>-1 test pattern@10.3125Gbps</li> <li>3. Measured with a PRBS 2<sup>31</sup>-1 test pattern@10.3125Gbps BER≤10<sup>-12</sup></li> <li>4. In G.652 and G.655(NDSF)</li> </ol> |       |            |        |

The following electrical characteristics are defined over the Recommended Operating Environment



unless otherwise specified.

|                                       |     |      |         |      |      |          |
|---------------------------------------|-----|------|---------|------|------|----------|
| Data Rate                             |     | -    | 10.3125 | -    | Gbps |          |
| Power Consumption                     |     | -    | 1200    | 1500 | mW   |          |
| Single Ended Output Voltage Tolerance |     | -0.3 | -       | 4.0  | V    |          |
| C common mode voltage tolerance       |     | 15   | -       | -    | mV   |          |
| Tx Input Diff Voltage                 | VI  | 400  |         | 1600 | mV   |          |
| Tx Fault                              | VoL | -0.3 |         | 0.4  | V    | At 0.7mA |
| Data Dependent Input Jitter           | DDJ |      |         | 0.10 | UI   |          |
| Data Input Total Jitter               | TJ  |      |         | 0.28 | UI   |          |
| Single Ended Output Voltage Tolerance |     | -0.3 | -       | 4.0  | V    |          |
| Rx Output Diff                        |     |      |         |      |      |          |





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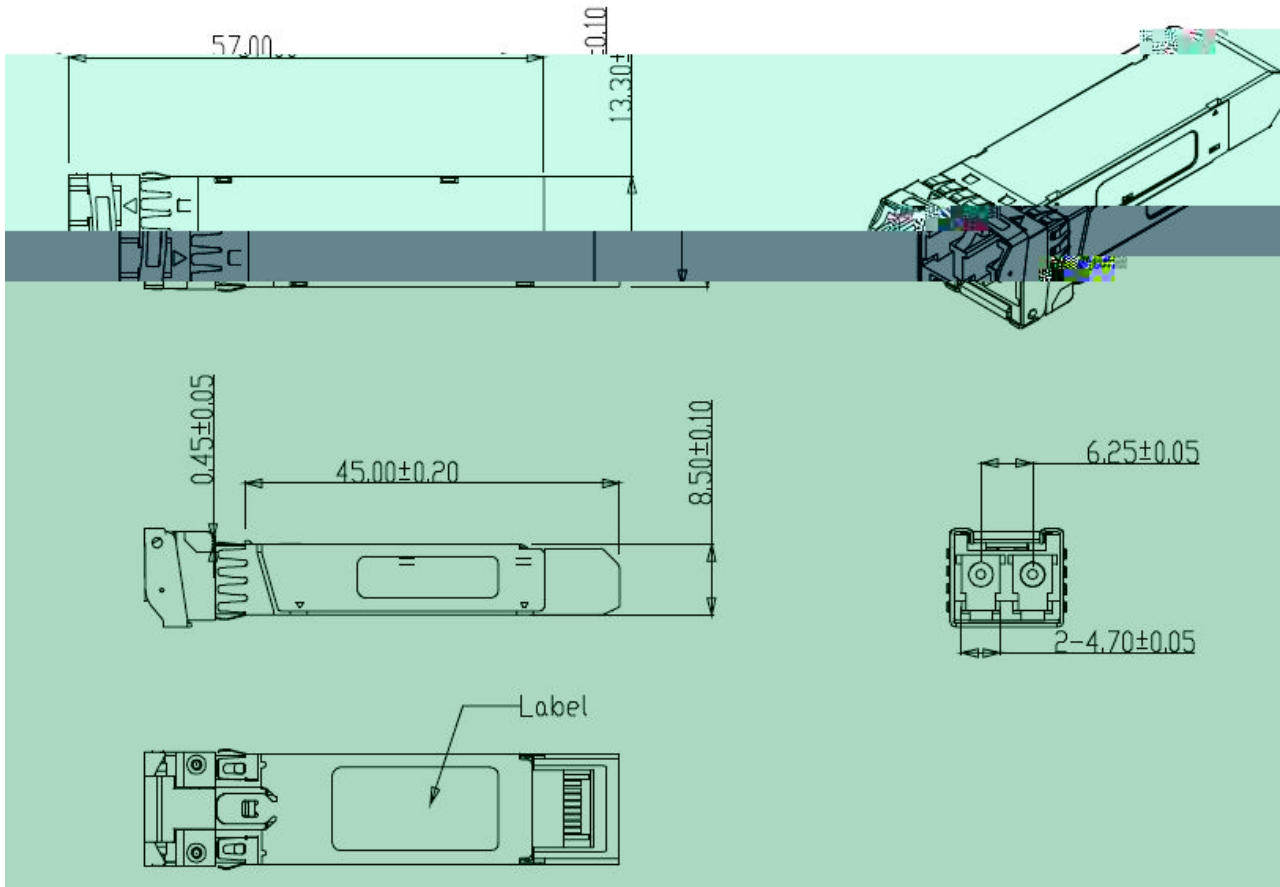
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|   |  |                    |  |
|---|--|--------------------|--|
|   |  |                    |  |
| 1 |  | Transmitter Ground |  |

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F-tone Networks SFP+ transceiver is designed to be Class I Laser safety compliant and is certified per the following standards:

|              |     |  |
|--------------|-----|--|
| Laser Safety | FDA |  |
|--------------|-----|--|



| FTCS-131X-20D  | 1310nm, 10Gbps, SFP+ 20km, 0°C ~ +70°C  |
|----------------|---|
| FTCS-131X-20DI | 1310nm, 10Gbps, SFP+ 20km, -40 to +85°C |

1. "Specifications for Enhanced Small Form Factor Pluggable Module SFP+", SFF-8431, Rev 4.1, July 6, 2009.
2. "Improved Pluggable Formfactor", SFF-8432, Rev 4.2, Apr 18, 2007
3. IEEE802.3ae – 2002
4. "Diagnostic Monitoring Interface for Optical Transceivers" SFF-8472, Rev 10.3, Dec 1, 2007

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