## T-11-155-D-SXX

## Features

- InGaAs/InP PIN Photodiode with transimpedance amplifier
- High sensitivity with AGC*
- Differential ended output
- Single +5 V operation
- -40 to $85^{\circ} \mathrm{C}$ operating temperature
- SC/LC/MU ROSA package
- ATM 155Mbps receiver/transceiver application
- Fast Ethernet receiver/transceiver application

| Absolute Maximum Rating $\left(\mathbf{T c}=\mathbf{2 5}{ }^{\circ} \mathrm{C}\right)$ |  |  |  |
| :--- | :---: | :---: | :---: |
| Parameter | Symbol | Value | Unit |
| Supply Voltage | $\mathrm{V}_{\mathrm{cc}}$ | 6 | V |
| Operating Temperature | $\mathrm{T}_{\text {opr }}$ | -40 to +85 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature | $\mathrm{T}_{\text {stg }}$ | -40 to +85 | ${ }^{\circ} \mathrm{C}$ |


| DC Electrical Characteristics $\mathbf{T c}=\mathbf{2 5 ^ { \circ }} \mathbf{C}$ ) |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Parameter | Symbol | Min | Typical | Max | Unit |
| Power Supply | $\mathrm{V}_{\text {cc }}$ | 4.5 | 5.0 | 5.5 | V |
| Differential Output Voltage | $\mathrm{V}_{\mathrm{d}}$ | - | 1 | - | V |
| Supply Current (no load) | $\mathrm{I}_{\mathrm{cc}}$ | - | - | 35 | mA |

Operating at : $\mathrm{V}_{\mathrm{cc}}=5 \mathrm{~V}, \mathrm{Tc}=25^{\circ} \mathrm{C}, \mathrm{R}_{\mathrm{L}}=3000 \Omega, \lambda=1310 \mathrm{~nm}, 9 / 125 \mu \mathrm{~m}$ SM fiber)

| AC/Optical and Electrical Characteristics( $\mathrm{Tc}=25^{\circ} \mathrm{C}$ ) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Parameter | Symbol | Min | Typical | Max | Unit | Test Condition |
| Detection Range |  | 1100 | 1310 | 1650 | nm | - |
| Gain @ 10 Mbps Differential | G | 0.17 | - | 220 | V/mW | $\lambda=1310 \mathrm{~nm}$ |
| Bandwidth | BW | 120 | 140 | - | MHz |  |
| Saturation Power | $\mathrm{P}_{\text {sat }}$ | -3 | 0 | - | dBm | $\lambda=1310 \mathrm{~nm}$ |
| Sensitivity | Sens | - | -38 | -36 | dBm | BER=10-10@155Mbps |
| Output Resistance | Rout | - | 50 | 65 | ohm |  |


| Connector Options | Package | Fiber | Connector |
| :--- | :---: | :---: | :---: |
| Model | ROSA | - | SC |
| T-11-155-D-SSC | ROSA | - | LC |
| T-11-155-D-SLC | ROSA | - | MU |
| T-11-155-D-SMU |  |  |  |



T-11-155-D-SSC


## Pin Assignment



## Pin assignment

1~Vc c
2~ $\overline{\text { Dout }}$
3~Dout
4~GND(CASE)

## Warnings

Handling Precautions: This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.
Laser Safety: Radiation emitted by laser devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

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