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1310 nm 622 Mbps 5pin ROSA

DI7P-9160-x Series

TYPE NAME: DI7P-9160-7

Product Description:

The LuxNet DI7P-9160-x ROSA (Receiver Optical Sub-Assembly) is designed for a high-speed, high-performance data communication and telecommunication applications. This device integrates our high-speed 1310 nm PIN detector with a 622Mbps trans-impedance amplifier (TIA) and capacitors with a TO-56 header with flat-window cap and optical port. The product is designed for OC-12 optical communication systems. The port has a fiber connector which transmits light through a receptacle into the PIN detector with high coupling efficiency.

Product Specifications:

Absolute Maximum Ratings (T = 25°C):

| Parameter | Symbol | Unit | Min. | Max. | Note |
|---------------------------|------------------|------|----------|------|-----------------|
| Operating Temperature | Top | °C | -40 | 85 | |
| Storage Temperature | T _{stg} | °C | -40 | 100 | |
| Solder Reflow Temperature | T _{stg} | °C | | 260 | 10 seconds max. |
| Power Supply Voltage | Vp | V | -0.5 | 6.0 | |
| Optical Power | Pin | dBm | 0.811.00 | 5 | |

Electro-Optical Characteristics (T = 25°C, unless noted otherwise):

| Parameter | Symbol | Unit | Min. | Typ. | Max.: | Test Condition |
|-------------------------------|-----------------|-------|------|---------|-------|--|
| Supply Voltage | Voc | Volts | 2.9 | 3.3 | 3.6 | THE STATE OF THE PARTY OF THE P |
| Supply Current | Icc | mA | | 18 | 23 | $V_{cc}=3.3V, R_L=50\Omega$ |
| Output Voltage (differential) | Vout | mV | | 125 | | $P_{in} = 100 \mu W, R_{L} = 50\Omega$ |
| Responsivity | R | KV/W | | 14.9 | | λ =1310nm V_{cc} =3.3V, P_{in} = 7.5 μ W, R_L = 50 Ω |
| Sensitivity | S | dBm | | -32 | -30 | λ=1310nm 2 ²³ - 1 PRBS, BER= 10 ⁻¹⁰ |
| Upper -3dB Bandwidth | BW | MHz | 450 | 650 | I | $V_{cc}=3.3V, RL = 50\Omega$ |
| Peak Wavelength | λ_p | nm | 1100 | 1310 | 1650 | |
| Rise/Fall Time | τ_r/τ_f | ps | | 350/350 | | V _{cc} =3.3V, (20%-80%) |
| Overload | | dBm | -3 | | | 221 |

^{*} Specifications are subject to change without notice.

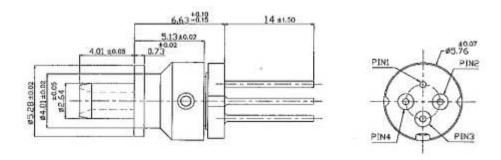
^{*} Screening per customer-specified reject limits is available.



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DI7P-9160-7

Dimensions: (mm)
All dimensions are nominal



PINOUT

| D17P-9160-7 | | | | | |
|-------------|-------------------------|--|--|--|--|
| Number | Function | | | | |
| 1 | GND | | | | |
| 2 | Inverted Output (D*) | | | | |
| 3 | Vcc | | | | |
| 4 | Non-inverted Output (D) | | | | |

^{*} Specifications are subject to change without notice.