

1203 APD (Avalanche Photo Diode)

FRM5N141GT



APD Receiver with Pre-amp, 10 Gb/s, -28 dBm Sensitivity

The FRM5N141GT incorporates a high bandwidth InGaAs APD photo diode, a GaAs amplifier in a hermetically sealed board mount type package. The APD is processed with modern epitaxial techniques resulting in a reliable performance over a wide range of operating conditions.

FEATURES

- Board Mount Type "GT" Package: 17 Pins
- InGaAs-APD with Pre-amplifier
- Integrated Design Optimizes Performance at Bit Rates Up to 10.7 Gb/s
- Electrical Differential Output
- High Sensitivity: -26.5 dBm
- Operates in Both C and L Wavelength Bands

USE IN

- Optical Receiver at 1310 nm or 1530 nm to 1610 nm in SONET, SDH, DWDM
- Other Optical Fiber Systems Operating Up to 10.7 Gb/s

| | |
|-------------------------|-----------------------|
| Photodiode Type | APD+Pre-amp |
| Spectral Response Range | 1270 nm to 1620 nm |
| Responsivity | 0.9 A/W |
| Frequency Response | 7.5 GHz |
| Overload | 0 dBm typ.; After VOA |
| Sensitivity | -5 dBm |
| APD Breakdown Voltage | 25 V typ. |
| Optical Return Loss | 27 dB min. |

FUNCTIONAL DIAGRAM

| Pin# | Symbol | Desc | Pin# | Symbol | Desc |
|------|---------|------------------------|------|---------|------------------------|
| 1 | GND | Case Ground | 10 | OUT | Output (+) |
| 2 | VPD | Photodiode bias | 11 | GND | Case Ground |
| 3 | NC(NIC) | No Internal Connection | 12 | GND | Case Ground |
| 4 | VPreamp | VEE (-5.2 V) | 13 | OFFSET | DC Offset Control |
| 5 | NC(NIC) | Ground | 14 | NC(NIC) | No Internal Connection |
| 6 | GND | Case Ground | 15 | NC(NIC) | No Internal Connection |
| 7 | GND | Case Ground | 16 | Rth | Thermistor for APD |
| 8 | OUT | Output (-) | | NC(NIC) | No Internal Connection |
| 9 | GND | Case Ground | 17 | GND | Case Ground |

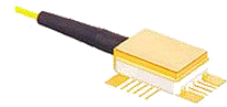
Order notes to our customers: The default parameters are as follows. For special needs, please contact sales.

1) Connector FC/APC, 900 um, 1 m by default for all devices except for high power devices.

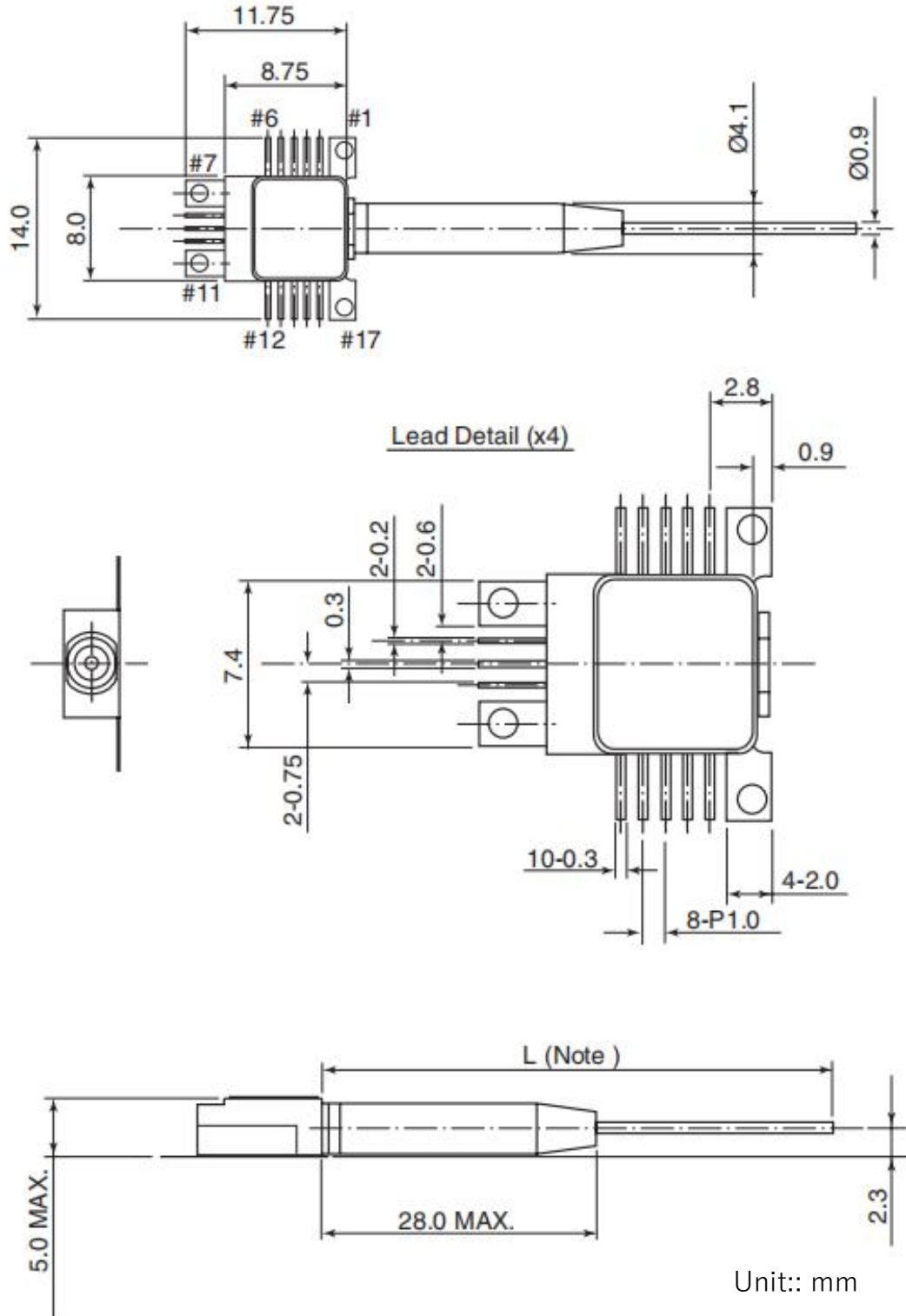
2) Slow axis working, fast axis blocked, connector key is aligned to slow axis by default for PM devices.

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MECHANICAL DRAWING



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