



**eblana** photonics

## EP1310-FP-OLC-AD

### *1310nm Fabry-Perot Laser - TOSA Module*

#### FEATURES

- Low threshold current
- High stability
- Standard LC connector
- Defocused launch for coupling to MMF

#### APPLICATIONS

- Optical communications
- Custom



#### ELECTRO-OPTICAL CHARACTERISTICS (T = 25°C unless stated otherwise):

| PARAMETER                                 | SYMBOL                          | MIN  | TYP  | MAX  | UNIT  | TEST CONDITIONS                             |
|---|---------------------------------|------|------|------|-------|---|
| Threshold Current                         | I <sub>th</sub>                 | 7    | 10   | 12   | mA    | CW  |
| Operating Current                         | I <sub>op</sub>                 | 20   | -    | 30   | mA    | CW  |
| Operating Voltage                         | V <sub>op</sub>                 | -    | 1.2  | 1.3  | Volts | I <sub>op</sub> = 20-30mA                   |
| Output Power (for all fiber orientations) | P <sub>f</sub>                  | 0.02 | -    | 0.04 | mW    | CW, I <sub>op</sub> = 20-30mA, MMFΦ62.5/125 |
| Centre Wavelength                         | λ                               | 1290 | 1310 | 1320 | nm    | CW  |
| Rise and Fall Time                        | T <sub>r</sub> , T <sub>f</sub> | -    | 0.1  | 0.2  | ns    | I = I <sub>th</sub> , 20%-80%               |
| Monitor output current                    | I <sub>mon</sub>                | 0.4  | 0.5  | 0.6  | mA    | I <sub>op</sub> = 20-30mA                   |
| Monitor dark current                      | I <sub>d</sub>                  | -    | -    | 0.1  | mA    | V <sub>rpd</sub> = 5V                       |

#### ABSOLUTE MAXIMUM RATINGS:

| PARAMETER                                | CONDITION           | MIN | MAX    | UNIT  |
|--|---------------------|-----|--------|-------|
| Laser Forward Current                    | -                   | -   | 100    | mA    |
| Reverse Voltage (LD)                     | -                   | -   | 2      | Volts |
| Reverse Voltage (PD) (V <sub>r</sub> )   | -                   | -   | 15     | Volts |
| Operating Temperature (T <sub>op</sub> ) | I = I <sub>op</sub> | -40 | 85     | °C    |
| Storage Temperature                      | -                   | -40 | 100    | °C    |
| mPD Forward Current (I <sub>rpd</sub> )  | -                   | -   | 2      | mA    |
| mPD Reverse Voltage (V <sub>rpd</sub> )  | -                   | -   | 15     | Volts |
| Lead soldering temperature/time          | -                   | -   | 260/10 | °C/s  |

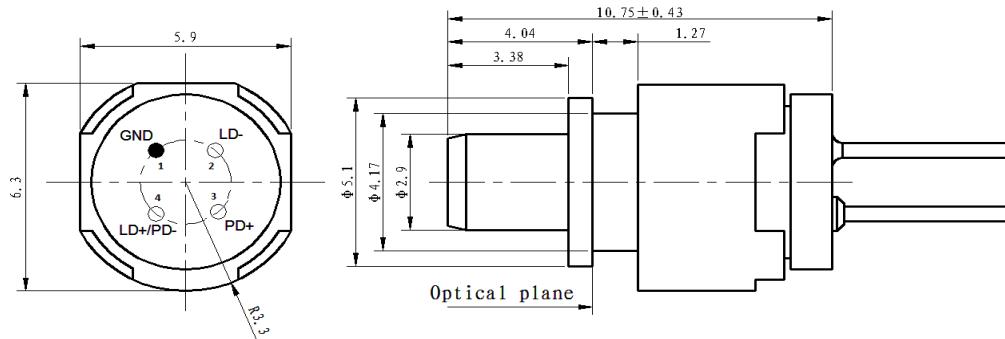
**PACKAGE:**

Fig. 1 - Package Outline (dimensions in mm) and pin/barrel orientation.

| Pin Assignment |         |
|----------------|---------|
| 1              | GND     |
| 2              | LD-     |
| 3              | PD+     |
| 4              | LD+/PD- |

Fig. 2 - Electrical Pinout

**REVISION HISTORY**

| Rev number | Date       | Reason  |
|------------|------------|---|
| 2.0        | 04/09/2015 | Original - New TOSA design with attenuation                         |
| 2.1        | 17/09/2015 | Min power spec changed to 0.02uW at lop.<br>Updated pinout drawing. |
| 2.2        | 18/09/2015 | Corrected mistake on rev number on second page, added rev history   |



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