

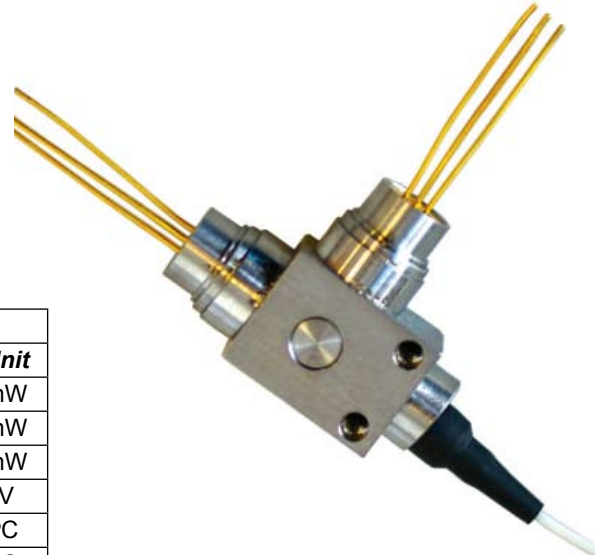
# Model FOD3514

## MM Dual Laser Diode Module 850/1310 nm for OTDR



### DESCRIPTION

Fabry-Perot lasers provide good stability and low noise in OTDR application. Low threshold and operating current guarantee low self heating and excellent reliability. Both laser diodes are hermetically sealed. Laser welded assembly provides long term mechanical stability.



RoHS Compliant

| ABSOLUTE MAXIMUM RATINGS           |                    |            |      |
|------------------------------------|--------------------|------------|------|
| Parameter                          | Symbol             | Rated      | Unit |
| Maximum CW Output Power            | P <sub>max</sub>   | 2          | mW   |
| Maximum Pulse Output Power@850 nm  | P <sub>p850</sub>  | 60         | mW   |
| Maximum Pulse Output Power@1310 nm | P <sub>p1310</sub> | 120        | mW   |
| Laser Diode Reverse Voltage        | V <sub>rd</sub>    | 2          | V    |
| Operating Temperature              | T <sub>op</sub>    | -10 to +50 | °C   |
| Storage Temperature                | T <sub>st</sub>    | -20 to +70 | °C   |
| Photodiode Reverse Voltage         | V <sub>rpd</sub>   | 20         | V    |

| TECHNICAL SPECIFICATIONS at 23°C |                  |                               |             |             |             |           |
|----------------------------------|------------------|-------------------------------|-------------|-------------|-------------|-----------|
| Parameter                        | Symbol           | Test conditions               | Min.        | Typ.        | Max.        | Unit      |
| <b>Central Wavelength</b>        | $\lambda_c$      | <b>P<sub>cw</sub>=1mW</b>     | <b>830</b>  | <b>850</b>  | <b>870</b>  | <b>nm</b> |
| Spectral Width                   | $\Delta\lambda$  | P <sub>cw</sub> =1mW          | -           | 1           | 2           | nm        |
| CW Output Power                  | P <sub>cw</sub>  | 50/125                        | 1.5         | -           | -           | mW        |
| Threshold Current                | I <sub>th</sub>  | 10μW                          | -           | 20          | 40          | mA        |
| Operation Current                | I <sub>op</sub>  | P <sub>p</sub> =60mW          | -           | 150         | 250         | mA        |
| Operation Voltage                | V <sub>op</sub>  | P <sub>p</sub> =60mW          | -           | 3           | 4.5         | V         |
| Monitor Current                  | I <sub>m</sub>   | P <sub>cw</sub> =1mW          | 0.1         | 0.5         | -           | mA        |
| <b>Central Wavelength</b>        | $\lambda_c$      | <b>P<sub>cw</sub>=1mW</b>     | <b>1290</b> | <b>1310</b> | <b>1330</b> | <b>nm</b> |
| Spectral Width                   | $\Delta\lambda$  | P <sub>cw</sub> =1mW          | -           | 7           | 10          | nm        |
| Pulse Output Power               | P <sub>p</sub> * | I <sub>op</sub> pulse = 700mA | 120         | -           | -           | mW        |
| Threshold Current                | I <sub>th</sub>  | 10μW                          | -           | 20          | 50          | mA        |
| Operation Voltage                | V <sub>op</sub>  | P <sub>p</sub> =120mW         | -           | 3           | 4.5         | V         |

\*duty rate ≤1%, pulse drop <10 %

