

1490 nm DFB LASER DIODE MODULES UNCOOLED MQW DFB LD WITH RECEPTACLE

DL-5500-1490 Series

FEATURES

- 2 1490 nm Uncooled Laser Diode with MQW Structure
- 2 High Reliability, Long Operation Life
- 2 Single Frequency Operation with High SMSR
- 2 0 to 70°C operation without active cooling
- 2 Build-in InGaAs monitor

APPLICATION

Trunk Line, FitL

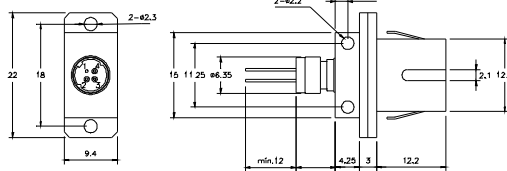
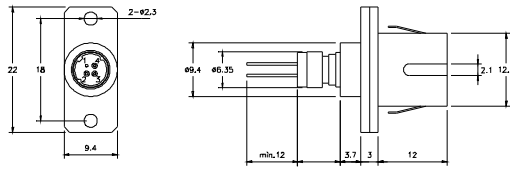
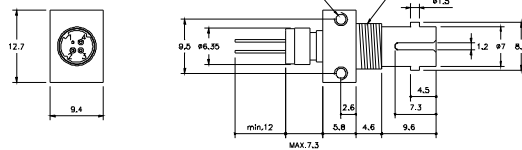
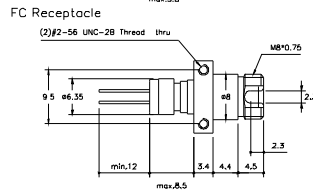
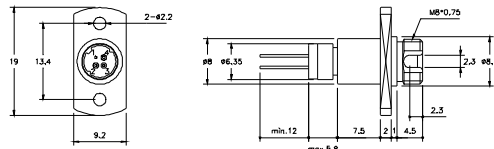
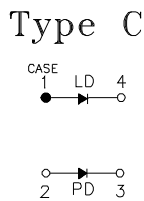
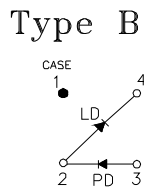
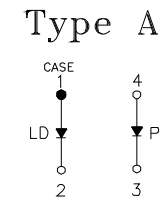
DESCRIPTION

DL-5500-1490 series are designed for coupling a single mode optical fiber with 1490 nm MQW DFB uncooled laser diode. DL-5500-1490 series are the best kits as light sources for telecom and datacom applications.

| ELECTRICAL AND OPTICAL CHARACTERISTICS (T _C =25 °C) | | | | | | |
|--|--|---|------------|--------|--------|------|
| Symbol | Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
| I _{th} | Threshold Current | CW | | 10 | 15 | mA |
| V _{OP} | Operating Voltage | CW, I _F =I _{th} +20mA | | 1.2 | 1.5 | V |
| P _f | Optical Output Power Part No:DL-552X-1490 DL-553X-1490 | CW, I _F =I _{th} +20mA | 1.0 2.0 | - - | - - | mW |
| λ _c | Center Wavelength | CW, I _{th} +20mA | 1483 | 1490 | 1495 | nm |
| SMSR | Side Mode Suppression Ratio | CW, I _{th} +20mA | 30 | 35 | | dB |
| t _r , t _f | Rise And Fall Times | I _F =I _{th} , I _{th} +20mA, 20~80% | | | 0.226 | ns |
| ΔP _f /P _f | Tracking Error | APC, 0~+70 °C | - | - | ±1.5 | dB |
| I _m | PD Monitor Current | CW, I _{th} +20mA, V _{RD} =1V | 100 | | | μA |
| I _D | PD Dark Current | V _{RD} =5V | | | 0.1 | μA |
| C _t | PD Capacitance | V _{RD} =5V, f=1MHz | | 10 | 15 | pF |

| ABSOLUTE MAXIMUM RATINGS (T _C =25 °C) | | | |
|--|----------------------------------|---------|------|
| Symbol | Parameter | Ratings | Unit |
| P _o | Optical Output Power (552X/553X) | 1.5 / 3 | mW |
| V _{RL} | LD Reverse Voltage | 2 | V |
| V _{RD} | PD Reverse Voltage | 10 | V |
| I _{FD} | PD Forward Current | 1.0 | mA |
| T _{opr} | Operating Temperature | 0 to 70 | °C |
| T _{stg} | Storage Temperature | -40~+85 | °C |

MECHANICAL DIMENSION (mm) and PIN ASSIGNMENT



Note: Specifications subject to change without notice.

ORDER INFORMATION

