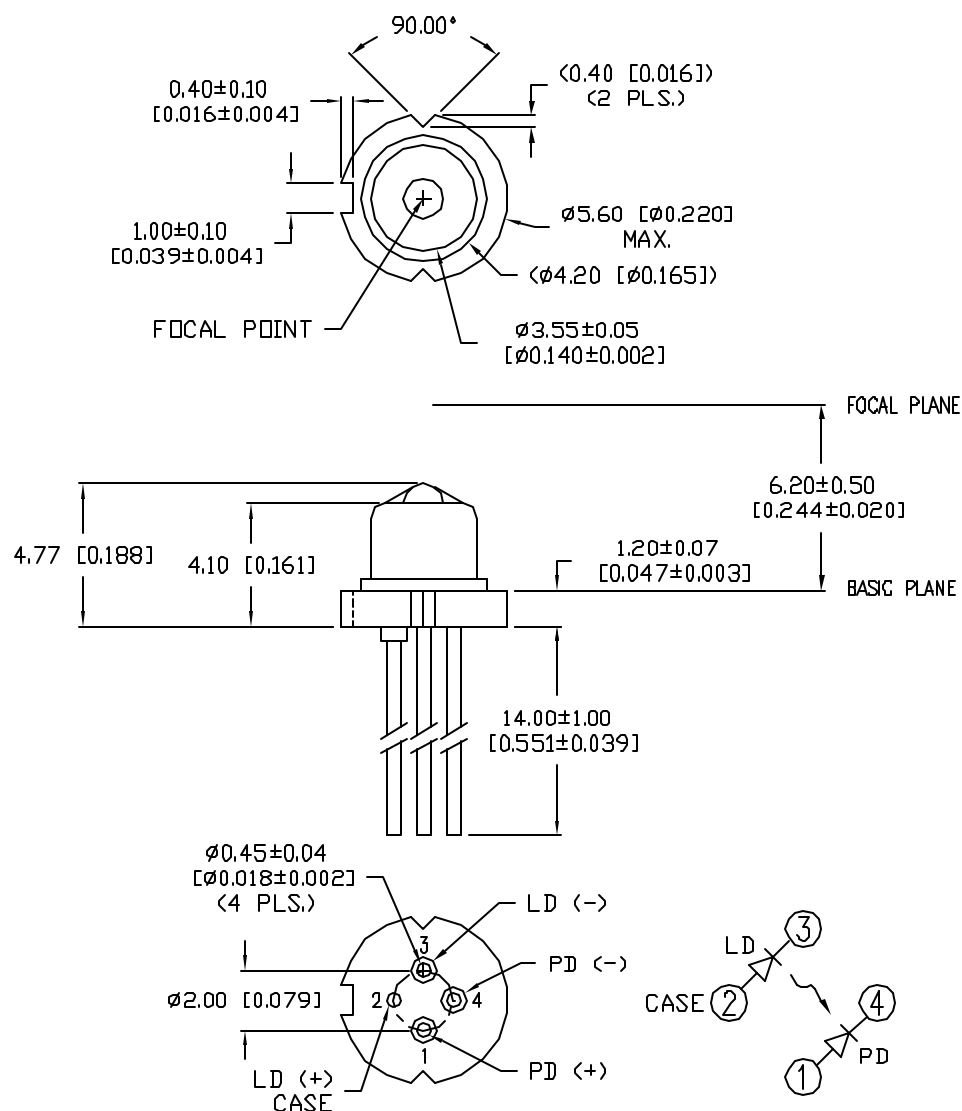


OED-LDC13001EBB

PRELIMINARY IN P/N DIR

ELECTRO-OPTICAL CHARACTERISTICS (T<sub>c</sub>=25°C), P<sub>o</sub>=5mW

| PARAMETER          | SYMBOL              | MIN  | TYP  | MAX  | TEST COND                              | UNITS |
|--------------------|---------------------|------|------|------|----------------------------------------|-------|
| LASING WAVELENGTH  | $\lambda$           | 1290 | 1310 | 1330 | CW                                     | nm    |
| SPECTRAL WIDTH     | $\Delta\lambda$     |      | 2    | 5    | CW                                     | nm    |
| FORWARD VOLTAGE    | V <sub>f</sub>      |      | 1.2  | 1.5  | CW                                     | V     |
| THRESHOLD CURRENT  | I <sub>th</sub>     |      | 12   | 20   |                                        | mA    |
| PD MONITOR CURRENT | I <sub>m</sub>      | 100  |      |      | CW, V <sub>R(PD)</sub> =2V             | μA    |
| PD DARK CURRENT    | I <sub>(DARK)</sub> |      |      | 0.1  | V <sub>R(PD)</sub> =5V                 | μA    |
| PD CAPACITANCE     | C <sub>t</sub>      |      | 6    | 15   | V <sub>R(PD)</sub> =5V, f=1MHz         | pF    |
| RISE TIME          | T <sub>r</sub>      |      |      | 0.5  | CW, I <sub>bias</sub> =I <sub>th</sub> | ns    |
| FALL TIME          | T <sub>f</sub>      |      |      | 0.5  | 10-90%                                 | ns    |
| SLOPE EFFICIENCY   |                     | 0.2  | 0.3  |      |                                        | mW/mA |
| BEAM DIVERGENCE:   | $\theta$            |      | 20   |      | CW,                                    | deg.  |
|                    | $\theta_L$          |      | 40   |      | FWHM                                   | deg.  |

ABSOLUTE MAXIMUM RATINGS (T<sub>c</sub>=25°C)

| PARAMETER          | SYMBOL             | MAX        | UNITS |
|--------------------|--------------------|------------|-------|
| OPTICAL POWER      | P <sub>o</sub>     | 10(CW)     | mW    |
| LD REVERSE VOLTAGE | V <sub>R(LD)</sub> | 2          | V     |
| PD REVERSE VOLTAGE | V <sub>R(PD)</sub> | 15         | V     |
| PD FORWARD CURRENT | I <sub>F(PD)</sub> | 1.0        | mA    |
| OPERATING TEMP.    | T <sub>op</sub>    | -40 TO +85 | °C    |
| STORAGE TEMP.      | T <sub>stg</sub>   | -40 TO +85 | °C    |

**WARNING**  
INVISIBLE LASER RADIATION,  
AVOID DIRECT EXPOSURE TO BEAM.

**CAUTION: STATIC SENSITIVE DEVICE**  
FOLLOW PROPER E.S.D. HANDLING PROCEDURES  
WHEN WORKING WITH THIS PART.

UNCONTROLLED DOCUMENT

\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005), LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030), MIN.=+DECIMAL PRECISION -0.00, MAX.=+0.00 -DECIMAL PRECISION

REV.

PART NUMBER

OED-LDC13001EBB

1310nm LASER DIODE, TO-18 (ø5.6mm) PACKAGE,  
10mW OUTPUT.

## CONFIDENTIAL INFORMATION

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## RELIABILITY NOTE

OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.

**LUMEX**  
INCORPORATED

290 E. HELLEN ROAD  
PALATINE, ILLINOIS 60067  
PHONE: (847) 359-2790  
WEB: <http://www.lumex.com>

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SCALE: N/A