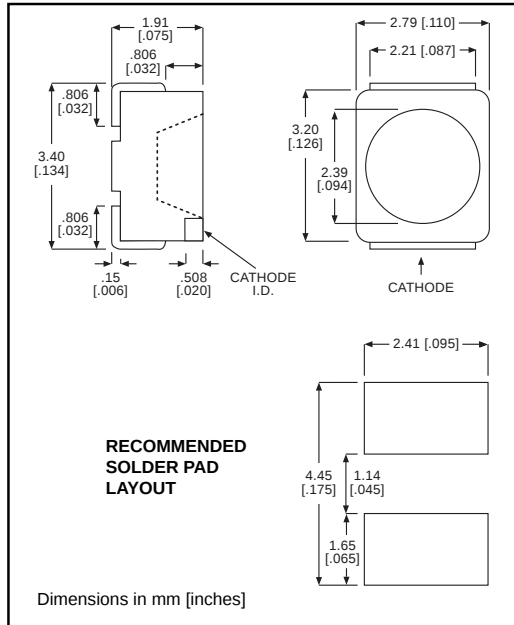
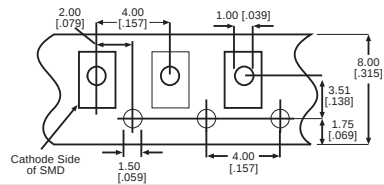


**microLED<sup>®</sup>****IR Emitter****Surface Mount LED - Preliminary****Dialight****597-3831-2xx****TAPING SPECIFICATIONS**  
(rear side of tape)**PART NO.\***

597-3831-2xx

**ABSOLUTE MAXIMUM RATINGS** ( $T_A=25^\circ\text{C}$ )

|                                        |                |
|----------------------------------------|----------------|
| Power Dissipation                      | 180 mW         |
| Forward Current                        | 100 mA         |
| Surge Current ( $\leq 10\mu\text{s}$ ) | 2.5 A          |
| Reverse Voltage                        | 5 V            |
| Junction Temperature                   | 100°C          |
| Storage Temperature                    | -55° to +100°C |
| Operating Temperature                  | -55° to +100°C |

**Benefits**

- Compatible with automatic placement equipment
- Compatible with infrared reflow processes
- Packaged on 8mm tape, 7" reels (meets EIA-481-1 standard)
- Helps to eliminate mixed technology PC board processing
- Compatible with Dialight's Optopipe™ Series light pipes

**\*ORDERING INFORMATION****597-3831-2xx**

packaging option

|    |                        |
|----|------------------------|
| 02 | 20 pieces on tape      |
| 07 | 7" reel, 2000 pcs/reel |

**OPERATING CHARACTERISTICS** ( $T_A=25^\circ\text{C}$ )

| LED Characteristics                                           | Value            | Units         | Test Conditions       |
|---------------------------------------------------------------|------------------|---------------|-----------------------|
| Peak Wavelength                                               | 880 $\pm$ 20     | nm            | $I_F = 100\text{ mA}$ |
| Spectral Bandwidth                                            | 80               | nm            | $I_F = 100\text{ mA}$ |
| Full Angle ( $2\theta_{1/2}$ )                                | 120°             | deg           |                       |
| Switching Times<br>(10% to 90% & 90% to 10%)                  | .5               | $\mu\text{s}$ | $I_F = 100\text{ mA}$ |
| Capacitance ( $V_R=0\text{ V}$ , $f = 1\text{ MHz}$ )         | 25               | pF            | $V_R=0\text{ V}$      |
| Forward Voltage ( $t_p = 20\text{ msec}$ )                    | 1.5 typ, 1.8 max | V             | $I_F = 100\text{ mA}$ |
| Forward Voltage ( $t_p = 100\text{ }\mu\text{sec}$ )          | 3 typ, 3.8 max   | V             | $I_F = 1\text{ A}$    |
| Reverse Current                                               | .01 typ, 1 max   | $\mu\text{A}$ | $V_R = 5\text{ V}$    |
| Radiant Intensity ( $t_p=20\text{ ms}$ ) (Steady State)       | $\geq 4$         | mW/sr         | $I_F = 100\text{ mA}$ |
| Radiant Intensity ( $t_p = 100\text{ }\mu\text{s}$ ) (Pulsed) | 48               | mW/sr         | $I_F = 1\text{ A}$    |

Solder Adherence per MIL-STD-202E, Method 208C