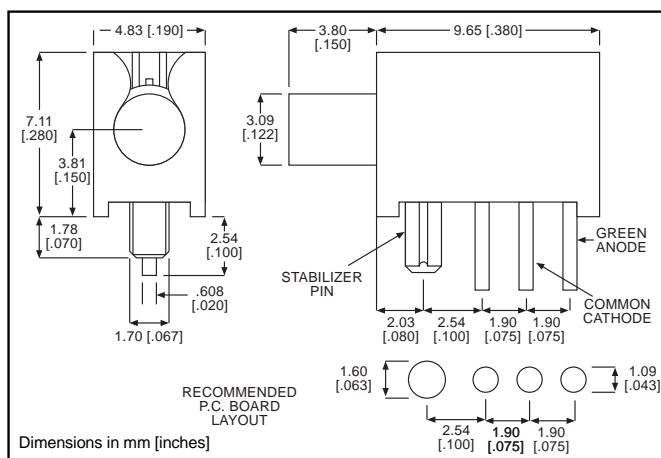


# 3mm, Flat Top LED CBI® Circuit Board Indicator In-line, 3 Leaded Bi-Color

# Dialight

## 551-3508



**PART NO.**

551-3508

**COLOR**

Red/Green

## Features

- Common Cathode simplifies design, and provides amber as a third color
- Locating pin provides stability during soldering
- Multiple CBIs form horizontal LED arrays on 4.2mm (0.1650") center-lines
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 31.5%
- Polymer content: PBT, 1.055 g
- Housing stand-offs facilitate PCB cleaning
- Solderability per MIL-STD-202F, method 208F
- LEDs are safe for direct viewing per IEC 825-1, EN-60825-1

## Tolerance note: As noted, otherwise:

- LED Protrusion:  $\pm 0.04$  mm [ $\pm 0.016$ ]
- CBI Housing:  $\pm 0.02$  mm [ $\pm 0.008$ ]

## Typical Operating Characteristics ( $T_A = 25^\circ\text{C}$ )

See LED data sheet for additional information

See page 4-70 and 4-71 for Reference Only LED Drive Circuit Examples. See page 4-72 for Pin Out

Part Number	Color	Peak Wavelength nm	I <sub>v</sub> mcd	V <sub>F</sub> Volts	Test Current (mA)	LED Data sheet	Page #
551-3508	Red/Green	630/560	4/4	2/2.1	20	3TF-9484	4-69

3mm LED  
Bi-Color  
Non-Tinted, Diffused

**Dialight**

3TD-9664, 3TD-986x, 3TF-9484

**\* NOT A VALID PART  
NUMBER. THIS SHEET IS FOR  
REFERENCE ONLY.**

TYPE

\*3TD-9664  
\*3TD-9868  
\*3TD-9869  
\*3TF-9484

COLOR

Red/Green  
Red/Green  
Yellow/Green  
Red/Green

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<b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A=25^\circ\text{C}$ )	Red/Green <b>-9664</b>	Red/Green <b>-9868</b>	Yellow/Green <b>-9869</b>	Red/Green <b>-9484</b>
Power Dissipation (mW)	75/75	100/100	60/100	75/75
Forward Current (mA)		30/30	20/30	30/30
Derating (mW/ $^\circ\text{C}$ ) From $25^\circ\text{C}$ *Derating (mA/ $^\circ\text{C}$ ) From $50^\circ\text{C}$	.85/.85	.4*/.4*	.25*/.4*	.33*/.67*
Peak Current (mA) Pulse width 10 $\mu\text{s}$	100/100	30/30	80/120	100/100
Operating Temperature ( $^\circ\text{C}$ )	-30/+85	-55/+100	-55/+100	-30/+85
Storage Temperature ( $^\circ\text{C}$ )	-30/+100	-55/+100	-55/+100	-30/+100
Soldering Temperature	260 $^\circ\text{C}$ , 6 seconds, 1.6 mm from case (9484 only)			
	260 $^\circ\text{C}$ , 5 seconds, 1.6 mm from case (except 9484)			

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

<b>OPERATING CHARACTERISTICS</b> ( $T_A=25^\circ\text{C}$ )		Red/Green <b>-9664</b>	Red/Green <b>-9868</b>	Yellow/Green <b>-9869</b>	Red/Green <b>-9484</b>
Luminous Intensity (mcd)	Min.	4/6	2.5*/3.7*	2.5*/2.5*	2/2
$I_F=20\text{mA}$ * $I_F=10\text{mA}$	Typical	8/12	4.7*/10*	4.3*/6.3*	4/4
Peak Wavelength (nm) $\lambda$ Peak	Typical	630/560	635/565	585/565	630/560
Viewing Angle ( $2\theta_{1/2}$ )	Typical	80 $^\circ$	60 $^\circ$ /60 $^\circ$	80 $^\circ$ /80 $^\circ$	
Forward Voltage (V)	Typical	2/2.1	2/2.1	2.1/2.1	2/2.1
$I_F=20\text{mA}$	Max.	2.5/2.5	2.8/2.8	2.8/2.8	2.5/2.5
Reverse Voltage (V)					
$I_R=100\mu\text{A}$	Min.	5	5	5	5

$\theta^\perp$  is the off axis angle at which the luminous intensity is half the axial luminous intensity