

2mm x 5mm Rectangular LED CBI® Circuit Board Indicator

Dialight

566-xx07

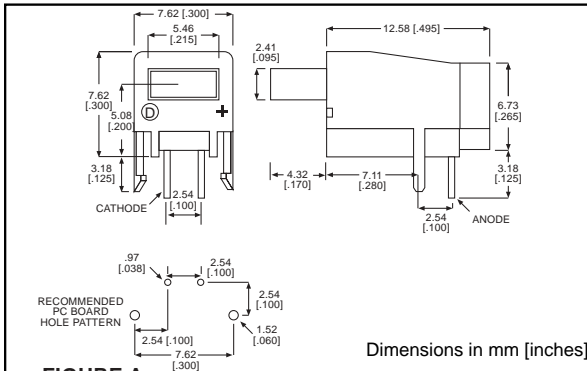


FIGURE A

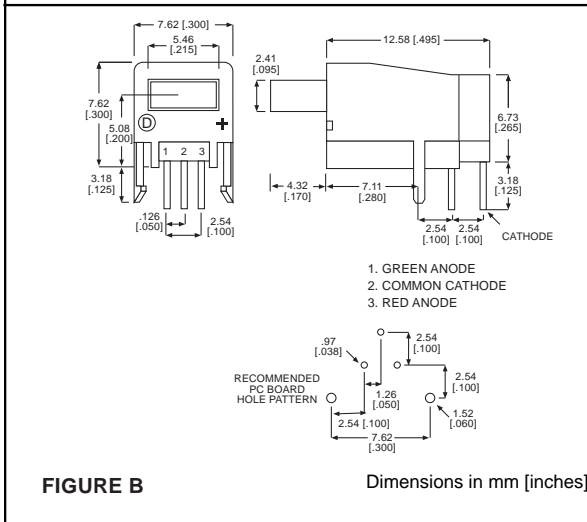


FIGURE B

PART NO.

566-0207

566-0307

566-0407

BI-COLOR

566-3507

COLOR

Green

Yellow

Red

Red/Green

FIG.

A

A

A

B

Features

- Multiple CBIs form horizontal LED arrays on 10.16mm (0.400") center-lines.
- Available common cathode (3 leaved) multi-color option simplifies circuit designs
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 32%
- Polymer content: PBT, 0.532 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: ± 0.04 mm [± 0.016]
- CBI Housing: ± 0.02 mm [± 0.008]

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

See LED data sheet for additional information

See Page 5-20 and 5-21 for Reference Only LED Drive Circuit Example

See Page 5-22 for Pin Out

Part Number	Color	Peak Wavelength nm	I_V mcd	V_F Volts	Test Current (mA)	Viewing Angle $2\theta_{\%}$	LED Data sheet	Page #
566-0207	Green	565	4	2.2	20	110°	521-9332	5-16
566-0307	Yellow	583	3.5	2.1	20	110°	521-9452	5-16
566-0407	Red	635	7.4	2	20	140°	521-9499	5-16
566-3507	Red/Green	635/565	3.5*/4*	1.9/2.1	10	100°	521-9406	5-17

* $I_F = 20\text{mA}$

2mm x 5mm Discrete LED
 Rectangular
 Tinted, Diffused

Dialight

521-9332, -9452, -9499, -9718



PART NO.	COLOR	DRAWING
521-9332	Green	A
521-9452	Yellow	A
521-9499	Red	B
521-9718	Blue	B

ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)	Green -9332	Yellow -9452	Red -9499	Blue -9718
Power Dissipation (mW)	135	85	100	189
Forward Current (mA)	30	20	30	30
Derating (mA/ $^\circ\text{C}$) From 50 $^\circ\text{C}$ 1. mW/ $^\circ\text{C}$ From 25 $^\circ\text{C}$.5	.34	.4	.45 ¹
Peak Current (mA)	500*	500*	120	180
<i>Pulse width = 1 ms *Pulse width = 10 μs</i>				
Operating Temperature ($^\circ\text{C}$)	-20/+100	-55/+100	-55/+100	-25/+75
Storage Temperature ($^\circ\text{C}$)	-55/+100	-55/+100	-55/+100	-25/+100
Soldering Temperature	260 $^\circ\text{C}$, 5 seconds, 1.6 mm from case			

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

OPERATING CHARACTERISTICS ($T_A=25^\circ\text{C}$)		Green -9332	Yellow -9452	Red -9499	Blue -9718
Luminous Intensity (mcd)	Min.	2.6	2.2	3	9
	Typical	4	3.5	7.4	18
$I_F=20\text{mA}$					
Peak Wavelength (nm)	Typical	565	583	635	430
λ_{Peak}					
Viewing Angle (2θ $^{\circ}$)	Typical	110 $^\circ$	110 $^\circ$	140 $^\circ$	120 $^\circ$
Forward Voltage (V)	Typical	2.2	2.1	2	5.3
	Max.	3	2.6	2.8	6
$I_F=20\text{mA}$					
Reverse Voltage (V), $I_R=100\mu\text{A}$	Min.	5	5	5	5

θ $^{\circ}$ is the off axis angle at which the luminous intensity is half the axial luminous intensity

2mm x 5mm Discrete LED

Bi-Color LED, Common Cathode

Non-Tinted, Diffused

Dialight

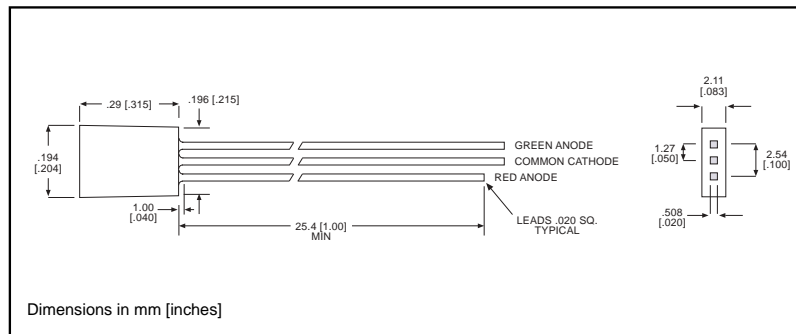
521-9406

PART NO.

521-9406

COLOR

Red/Green



ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

Red/Green
-9406

Power Dissipation (mW)	135/135
Derating (mW/°C) From 25°C	1.8/1.8
Forward Current (mA)	25/25
Peak Current (mA) Pulse width = 10 μs	90/90
Operating Temperature (°C)	-20/+85
Storage Temperature (°C)	-55/+100
Soldering Temperature	260°C, 5 seconds, 1.6 mm from case

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

OPERATING CHARACTERISTICS (T_A=25°C)

Red/Green
-9406

Luminous Intensity (mcd)	Min.	2.1/2.6
I _F =20mA	Typical	3.5/4
Peak Wavelength (nm)	Typical	635/565
λ Peak		
Viewing Angle (2Θ ^{1/2})	Typical	100°
Forward Voltage (V)	Typical	1.9/2.1
I _F =10mA	Max.	2.4/2.7

Θ^{1/2} is the off axis angle at which the luminous intensity is half the axial luminous intensity

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