



# Surface Mount LED Selector Guide Prism® CBI® LED Circuit Board Indicators

Micro LED® Surface Mount LEDs





## 40 Years of LED Experience



#### Prism® CBI®

Dialight's Prism indicators are the industry's only SMD indicator series designed to survive 260°C peak reflow temperature AND provide the aesthetic appeal of a diffused lens for enhanced viewing. Ideal for limited-space applications and board-edge mounting, the Prism Series is available in a variety of package sizes including single level, bi-level, and tri-level configuration and in 2mm and 3mm lens size. The integral light pipes used in Prism are engineered for maximum light transmission and minimal light bleed while the diffused lens is also ideal for bi-color and tri-color applications where color-mixing is desired.



#### Micro LED® SMD LED

Dialight's Micro LED Surface Mount LED product line provides one of the industry's widest range of discrete LEDs. Packaged in ChipLED, PLCC, right-angle and reverse-mount configurations, Dialight offers a full range off colors and intensities, including the latest AllnGaP and InGaN technology. With such a wide variety of mounting styles, colors, intensities, viewing angles and lens features, Micro LED series is sure to include a cost-effective solution to any application.

Contact your Authorized Dialight Distributor or local Sales Representative for more information or samples. http://www.dialight.com/WhereToBuy/Status-Indication

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#### Features and Benefits

#### Prism® CBI®

- Compatible with automatic pick-and-place equipment for reduced installation costs
- RoHS Compliant
- Available with 2mA low current LED
- Eliminates wave soldering process
- Black, low-profile PPA housing enhances the contrast ratio for better clarity

#### Micro LED® SMD LED

- Can be used with Dialight's wide-range of Optopipe® series light pipes.
- Package sizes include 0603, 0606, 0805, 1206, 1208,1210,1616
- Compatible with infrared reflow processes and JEDEC standards
- Helps to eliminate mixed technology pc board processing
- RoHS compliant
- Available in 2mA low current versions

#### Typical Applications

- Data center Infrastructure
  - Servers Rack mount; blade; tower
  - Storage High-performance storage subsystems for high- end enterprise
- Networking Equipment for enterprise data centers and telecom communication centers
  - Switches, routers, and network control equipment interconnected using fiber optic and high speed wiring
- Storage Networking Hardware
  - Fiber channel host bus adapter cards (HBAs); converged network adapter cards (CNAs); \\SCSi adapter cards; \InfiniBand adapter cards
- Next-Gen Wireless
  - Wireless Infrastructure
- Electronic Test & Measurement Instruments
- Communications Testing Equipment
- · Process controls
- Automation
- Medical
- Handheld devices
- Battery powered applications (2mA version)

The following pages are organized as a product overview. Additional information is available at www.dialight.com including detailed specs and schematics, 3D models, and operating characteristics. The most recent version of this selector guide can be found at: http://www.dialight.com/Assets/Brochures And Catalogs/Indication/SMT Selector Guide.pdf

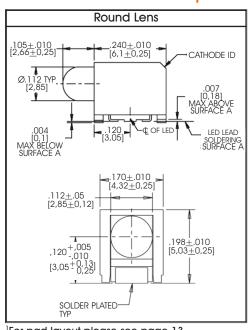


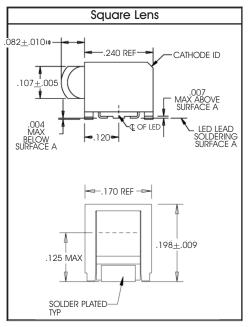
## 591 Series Prism® CBI®

## **Single Level Surface Mount LED**



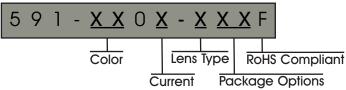
## Specifications<sup>1</sup>





<sup>1</sup>For pad layout please see page 13

#### **Order Code**



Current							
Current Code	Current Type						
1	Standard						
4	Low Current <sup>2</sup>						

<sup>2</sup>Detail on page 14

Lens Type						
Lens Code	Lens Type					
0	Round					
1	Square					

Packaging Type							
Packaging Code	Packaging						
02	20 piece strip						
07	7" Reel						
13	13" Reel						

		Color Field		Operating Characteristics				
Color Code		Material	Feature	Test Condition	vt iyp	Type Luminous Intensity (mcd)	Type Dom Wavelength (nm)	
20*	Red	GaAsP/GaP	Hi. Efficiency	If = 10mA	2.0	5.0	628	
21	Red	AlGaAs		If = 10mA	1.8	23.9	645	
22	Green	AlGaP	Hi. Intensity	If = 10mA	2.1	9.1	570	
23*	Green	GaP		If = 10mA	2.0	4.0	570	
24*	Yellow	GaAsP/GaP		If = 10mA	2.0	5.0	587	
25*	Orange	GaAsP		If = 10mA	2.0	13.7	606	
26	Blue	InGaN		If = 20mA	3.5	6.0	465	
27	Yellow	AllnGaP		If = 10mA	2.0	33.6	587	
28	White	InGaN		If = 20mA	3.5	19.0	x .33 y .33	
30	R/G	GaAsP		If = 10mA	2.0/2.0	6.5/8.0	628/570	
31	Y/G	GaAsP/GaP		If = 10mA	2.0/2.0	6.5/8.0	586/570	
32	R/Y	AlGaP/AlGaP		If = 10mA	2.0/2.0	6.5/6.5	528/586	
34	R/B	AllnGaP/GaN		If = 20mA	1.9/3.9	30/5	626/470	
35	R/G/B	AllnGaP/InGaN		If = 20mA	2.6/4.5/2.6	10/5/16	645/466/570	
36	O/G	GaAsP/GaP		If = 10mA	2.0/2.0	5.5/8.5	606/570	

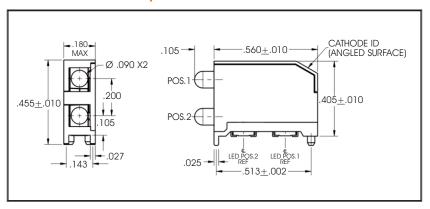
<sup>\*</sup>Low current version only available in marked colors (\*). See page 14 for details.



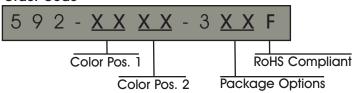
## 592 Series Prism® CBI®

## **Bi-Level Surface Mount LED**

## **Specifications**



#### **Order Code**

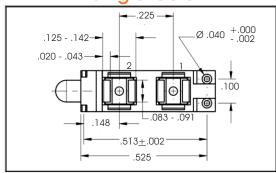


Packaging Type							
Packaging Code	Packaging						
02	10 piece strip						
13	13" Reel						

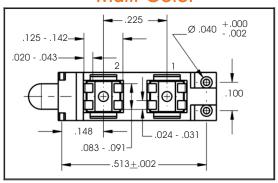
		Color Field		Operating Characteristics					
Color Code	Color	Material	Feature	Test Condition	Vf Typ (Volts)	Type Luminous Intensity (mcd)	Typ Dom Wavelength (nm)		
20	Red	GaAsP/GaP	Hi. Efficiency	If = 10mA	2.0	3	628		
21	Red	AlGaAs		If = 10mA	1.8	9	645		
22	Green	AlGaP	Hi. Intensity	If = 10mA	2.0	6	570		
23	Green	GaP		If = 10mA	2.0	4	570		
24	Yellow	GaAsP/GaP		If = 10mA	2.0	2	587		
25	Orange	GaAsP		If = 10mA	2.0	2	606		
26	Blue	InGaN		If = 10mA	3.5	6	465		
27	Yellow	AllnGaP		If = 20mA	2.0	60	587		
28	White	InGaN		If = 10mA	3.1	34	x .33 y .33		
29	Green	InGaN		If = 20mA	3.7	56	525		
30	R/G	GaAsP		If = 10mA	2.0/2.0	3/4	628/570		
31	Y/G	GaAsP/GaP		If = 10mA	2.0/2.0	2/3	590/570		
32	R/Y	AlGaP/AlGaP		If = 20mA	2.0/2.0	21/34	633/587		
34	R/B	AllnGaP/InGaN		If = 10mA	1.9/3.0	21/24	625/467		
35	R/G/B	AllnGaP/InGaN		If = 20mA	1.9/3.4/3.4	31/84/16	626/525/470		
36	O/G	GaAsP/GaP		If = 10mA	2.0/2.0	3/4	606/570		



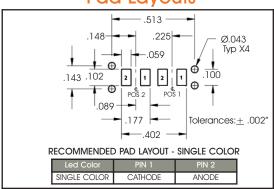
## Single Color

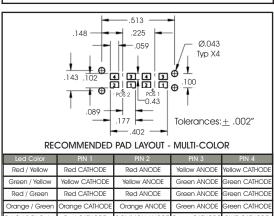


#### Multi-Color



## **Pad Layouts**



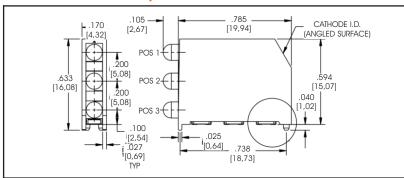


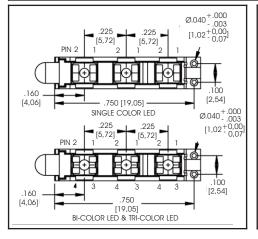


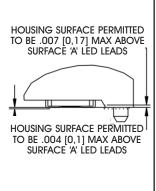
## 593 Series Prism® CBI®

## **Tri-Level Surface Mount LED**

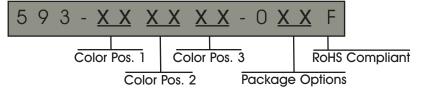
## **Specifications**





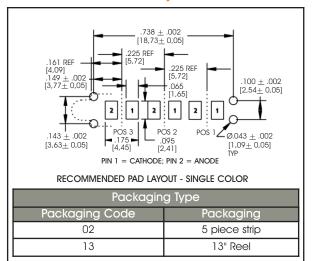


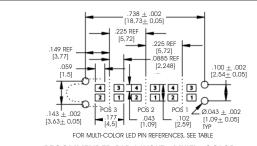
#### Order Code





## **Pad Layouts**





#### RECOMMENDED PAD LAYOUT - MULTI - COLOR

	MULII-COLOR LED PIN REFERENCES											
Led Color	Led Color PIN 1		PIN 3	PIN 4								
R/Y BI-COLOR	RED CATHODE	RED ANODE	YELLOW ANODE	YELLOW CATHODE								
Y/G BI-COLOR	YELLOW CATHODE	YELLOW ANODE	GREEN ANODE	GREEN CATHODE								
R/G BI-COLOR	RED CATHODE	RED ANODE	GREEN ANODE	GREEN CATHODE								
R/G/B BI-COLOR	RED CATHODE	COMMON ANODE	GREEN CATHODE	BLUE CATHODE								
-												

	Co	olor Field		Operating Characteristics					
Color Code	Color	Material	Feature	Test Condition	Vf Typ Typ Luminous (Volts) Intensity (mcd) If = 20mA		Typ Dom Wavelength (nm)		
20	Red	AllnGaP	Hi. Efficiency	If = 10mA	2.0	6.0	628		
21	Red	AlGaAs		If = 10mA	1.75	29.0	645		
22	Green	AllnGaP	Hi. Intensity	If = 10mA	2.0	16.0	570		
23	Green	AllnGaP		If = 10mA	2.0	11.0	570		
24	Yellow	GaAsP/GaP		If = 10mA	2.0	11.0	587		
26	Blue	InGaN		If = 10mA	3.5	7.0	465		
27	Yellow	AllnGaP		If = 10mA	2.0	80.0	587		
28	White	InGaN		If = 10mA	3.1	85.0	x .33 y .33		
29	Green	InGaN		If = 20mA	3.4	150.0	525		
30	R/G	GaAsP		If = 10mA	2.0/2.0	7/10	628/570		
31	Y/G	GaAsP/GaP		If = 10mA	2.0/2.0	6/10	590/570		
32	R/Y	AlGaP/AlGaP		If = 20mA	2.0/2.0	45/70	633/587		
35	R/G/B	AllnGaP/InGaN		If = 20mA	1.9/3.4/3.4	35/70/20	626/525/470		

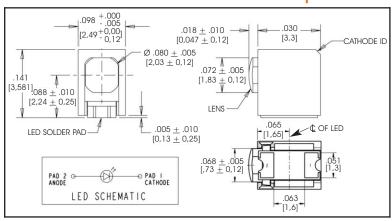


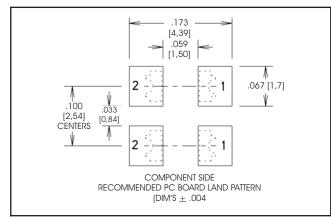
## **595 Series**

## 2mm Single Level Prism® CBI®

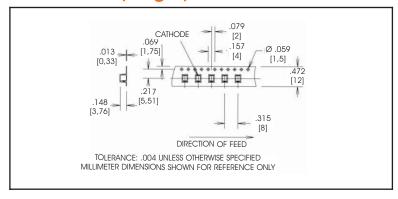


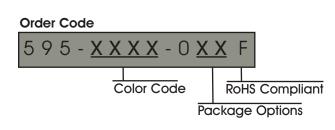
## **Specifications**





## **Taping Specification**





	C	Color Field		Operating Characteristics				
Color Code	Color	Material	Feature	Test Condition				
2101	Red	AlGaAs		20 mA	1.7	25.0	647	
2201	Green	AllnGaP	Hi. Intensity	20 mA	2.1	70.0	572	
2301	Green	AllnGaP		20 mA	2.1	11.0	572	
2401	Yellow	AllnGaP		20 mA	2.2	9.0	586	
2501	Orange	AllnGaP		20 mA	2.2	9.0	606	
2602	Blue	InGaN		20 mA	3.3	80.0*	470	
2701	Yellow	AllnGaP		20 mA	2.0	41.0*	590	
2902	Green	InGaN		20 mA	3.3	300.0*	525	

Packaging Type						
Packaging Code	Packaging					
02	20 piece strip					
07	7" Reel					
13	13" Reel					

<sup>\*</sup>Test condition = 10mA



## Micro LED® SMD LED

MICIO	FED 21AII	J LED									
ChipLED	Dialight Part Number	Color	Material	Dom .\(\lambda\) Typ. (nm)	Intensity Typ. (mcd)	Forward Voltage Typ. (V)	Viewing Angle	Height	Test Current (mA)	Fig	Туре
0603 Series I	Package (1.6mm)	X 0.8mm X Heig	ht)								
	597-3326-607F	Green	InGaN	525	150	3.4	130	0.8	20	1	Single Color
	597-3607-607F	Blue	InGaN	470	60	3.3	130	0.8	20	1	Single Color
	597-5004-407F	Red	AllnGaP	626	50	1.9	152	0.7	20	1	Single Color
	597-5112-407F	Red	AlGaAs	647	11.7	1.7	152	0.7	20	1	Single Color
	597-5203-407F	Orange	GaAsP	606	3.4	2.2	152	0.7	20	1	Single Color
	597-5213-407F	Orange	AllnGaP	605	65	1.9	152	0.7	20	1	Single Color
	597-5223-407F	Yellow	AllnGaP	590	65	1.9	152	0.7	20	1	Single Color
	597-5312-407F	Green	GaP	567	6.4	2.1	152	0.7	20	1	Single Color
	597-5412-407F	Yellow-Green	GaP	572	11.7	2.1	152	0.7	20	1	Single Color
	598-8010-107F	Red	AllnGaP	635	40	2.2	140	0.7	20	2	Single Color
	598-8020-107F	Red-Orange	AllnGaP	625	150	2	140	0.7	20	2	Single Color
	598-8030-107F	Orange	AllnGaP	605	80	2	140	0.7	20	2	Single Color
	598-8040-107F	Yellow	AllnGaP	593	130	2	140	0.7	20	2	Single Color
	598-8050-107F	Yellow	AllnGaP	587	130	2	140	0.7	20	2	Single Color
	598-8060-107F	Yellow-Green	AllnGaP	573	40	2	140	0.7	20	2	Single Color
	598-8070-107F	Green	GaP	566	20	3.2	140	0.7	20	2	Single Color
	598-8081-107F	Green	InGan	523	300	3.2	140	0.7	20	2	Single Color
	598-8091-107F	Blue	InGan	473	90	3.2	140	0.7	20	2	Single Color
0606 Series I	Package (1.6mm										
	598-8410-207CF	Red / Green	AllnGaP	635 / 565	60 / 40	2/2	140	0.7	20	3	Bi-Color
	598-8430-207CF	Orange / Green	AllnGaP	605 / 568	100 / 40	2/2	140	0.7	20	3	Bi-Color
	598-8440-207CF	Yellow / Green	AllnGaP	590 / 570	135 / 50	2/2	140	0.7	20	3	Bi-Color
	598-8450-207CF	Yellow / Green	AllnGaP / InGaN	592 / 530	120 / 120	2 / 3.2	140	0.7	20	3	Bi-Color
0	598-8460-207CF	Yellow / Red	AllnGaP	590 / 640	135 / 50	2 / 2.2	140	0.7	20	3	Bi-Color
The state of the s	598-8710-307F	Red / Green / Blue	AllnGaP / InGaN / InGaN	635 / 525 / 470	60 / 120 / 90	2 / 3.2 / 3.2	140	0.7	20	4	Tri-Color
	598-8720-307F	Red-Orange / Green / Blue	AllnGaP / InGaN / InGaN	625 / 525 / 470	120 / 150 / 60	2 / 3.2 / 3.2	140	0.7	20	4	Tri-Color
	598-8740-307F	Yellow / Green / Blue	AllnGaP / InGaN / InGaN	590 / 525 / 475	110 / 220 / 90	2 / 3.2 / 3.2	140	0.7	20	4	Tri-Color
0805 Series Po	ackage (2.0mm X	1.25mm X Heigl									
	597-3003-407F	Red	AllnGaP	626	50	1.9	150	0.8	20	5	Single Color
	597-3006-607F	Red	GaP	630	6	2.0	130	1.1	10	5	Single Color
	597-3212-407F	Orange	AllnGaP	605	65	1.9	150	0.8	20	5	Single Color
	597-3222-407F	Amber	AllnGaP	590	65	1.9	150	0.8	20	5	Single Color
	597-3305-607F	Green	GaP	569	8	2.1	130	1.1	10	5	Single Color
	597-3405-607F	Yellow	GaP	588	6	2.1	130	1.1	10	5	Single Color
	597-5111-407F	Red	AlGaAs	647	11.7	1.7	150	0.8	20	5	Single Color
	597-5202-407F	Orange	GaP	606	3.7	2.2	150	0.8	20	5	Single Color
	597-5311-407F	Green	GaP	567	6.4	2.1	150	0,8	20	5	Single Color
	597-5411-407F	Yellow	GaP	572	11.7	2.1	150	0.8	20	5	Single Color
	598-8110-107F	Red	AllnGaP	635	40	2.2	140	0.7	20	6	Single Color
	598-8120-107F	Red-Orange	AllnGaP	625	150	2	140	0.7	20	6	Single Color
	598-8130-107F	Orange	AllnGaP	605	80	2	140	0.7	20	6	Single Color
	598-8140-107F	Yellow	AllnGaP	593	130	2	140	0.7	20	6	Single Color
	598-8150-107F	Yellow	AllnGaP	587	130	2	140	0.7	20	6	Single Color
	598-8160-107F	Yellow-Green	AllnGaP	573	40	2	140	0.7	20	6	Single Color
	598-8170-107F	Green	GaP	566	20	3.2	140	0.7	20	6	Single Color
	598-8181-107F	Green	InGan	523	300	3.2	140	0.7	20	6	Single Color
	598-8191-107F	Blue	InGan	473	90	3.2	140	0.7	20	6	Single Color
1206 Series F	Package (3.2mm)			/67			100		00		
	597-3007-607F	Red	GaP	621	8	2.0	130	1.1	20	7	Single Color
	597-3302-607F	Green	GaP	569	8	2.1	130	1.1	10	7	Single Color
	597-3403-607F	Yellow	GaAsP	588	6	2.1	130	1.1	10	7	Single Color
	598-8210-107F	Red	AllnGaP	635	40	2.2	140	0.7	20	8	Single Color
	598-8220-107F	Red-Orange	AllnGaP	625	150	2	140	0.7	20	8	Single Color
4	598-8230-107F	Orange	AllnGaP	605	80	2	140	0.7	20	8	Single Color
	598-8240-107F 598-8250-107F	Yellow Yellow	AllnGaP AllnGaP	593 587	130 130	2	140 140	0.7 0.7	20 20	8	Single Color
	598-8250-107F 598-8260-107F	Yellow-Green	AllnGaP	573	40	2	140	0.7	20	8	Single Color Single Color
	598-8270-107F	Green	GaP	566	20	3.2	140	0.7	20	8	Single Color
							140	0.7		8	
	598-8281-107F 598-8291-107F	Green Blue	InGan InGan	523 473	300 90	3.2			20		Single Color Single Color



# Micro LED® SMD LED (cont.)

ChipLED	Dialight Part Number	Color	Material	Dom .λ Typ. (nm)	Intensity Typ. (mcd)	Forward Voltage Typ. (V)	Viewing Angle	Height	Test Current (mA)	Fig	Туре
1206 Series F	Package with Le	ns (3.0mm X 1.6	mm X Height)								
	597-3612-407F	Blue	InGaN	470	133	3.3	50	1.5	20	9	Single Color
	597-3311-407F	Green	GaP	567	12	2.1	70	1.5	20	9	Single Color
	597-3312-407F	Green	AllnGaP	561	42	2.1	60	1.5	20	9	Single Color
	597-3325-407F	Green	InGaN	525	415	3.3	50	1.5	20	9	Single Color
5	597-3111-407F	Red	GaAlAs	647	33.6	1.7	70	1.5	20	9	Single Color
	597-3021-407F	Red	AllnGaP	626	240	1.9	60	1.5	20	9	Single Color
	597-3202-407F	Orange	AllnGaP	605	240	1.9	60	1.5	20	9	Single Color
	597-3201-407F	Orange	GaAsP/GaP	606	9	2.2	70	1.5	20	9	Single Color
	597-3401-407F	Yellow	GaAsP	590	6	2.2	70	1.5	20	9	Single Color
1208 Series F	Package with Re	flector (3.0mm)	K 2.0mm X Hei	ght)							
	597-3002-507F	Red	AllnGaP	630	63	2.2	110	1.3	20	10	Single Color
	597-3021-507F	Red	GaAsP	653	6.3	2.0	110	1.3	20	10	Single Color
	597-3032-507F	Red	AllnGaP	620	100	2.2	110	1.3	20	10	Single Color
	597-3111-507F	Red	AlGaAs	662	16	1.75	110	1.3	20	10	Single Color
	597-3202-507F	Orange	AllnGaP	605	160	2.2	110	1.3	20	10	Single Color
	597-3211-507F	Orange	GaAsP	612	10	2.0	110	1.3	20	10	Single Color
	597-3301-507F	Green	AllnGaP	573	25	2.2	110	1.3	20	10	Single Color
	597-3312-507F	Green	AllnGaP	560	18	2.1	110	1.3	20	10	Single Color
	597-3322-507F	Green	InGaN	525	140	3.2	110	1.3	20	10	Single Color
	597-3401-507F	Yellow	GaAsP	588	6.3	2.1	110	1.3	20	10	Single Color
	597-3402-507F	Yellow	AllnGaP	590	160	2.2	110	1.3	20	10	Single Color
	597-3502-507F	Yellow-Green	AllnGaP	572	25	2.2	110	1.3	20	10	Single Color
	597-3602-507F	Blue	InGaN	470	100	3.3	110	1.3	20	10	Single Color
	597-3902-507F	White	InGaN	x: 0.3 y: 0.3	900	3.2	110	1.3	20	10	Single Color
1210 Series F	Package (3.2mm	X 2.7mm X Hei	ght)								
	597-7702-607F	Red/Green	GaAsP/GaP	621/569	12/15	2.0/2.1	130	1.1	20	11	Bi-Color
	597-7722-607F	Yellow/Green	GaP/GaAsp	588/569	9/15	2.1/2.1	130	1.1	20	11	Bi-Color
	598-8610-207F	Red / Green	AllnGaP	635 / 565	60 / 40	2/2	140	0.7	20	12	Bi-Color
	598-8621-207F	Red-Orange / Green	AllnGaP / InGaN	625 / 525	100 / 220	2 / 3.2	140	0.7	20	12	Bi-Color
	598-8631-207F	Red-Orange / Green	AllnGaP	625 / 568	110 /40	2/2	140	0.7	20	12	Bi-Color
	598-8640-207F	Yellow / Green	AllnGaP	590 / 570	135 / 50	2/2	140	0.7	20	12	Bi-Color
	598-8660-207F	Yellow / Red	AllnGaP	590 / 640	135 / 50	2 / 2.2	140	0.7	20	12	Bi-Color
	598-8610-307F	Red / Green / Blue	AlinGaP	635 / 525 / 470	60 / 120 / 80	2 / 3.2 /3.2	140	0.7	20	13	Tri-Color
	598-8920-307F	Red-Orange / Green / Blue	AllnGaP / InGaN / InGaN	625 / 525 / 470	120 / 150 / 60	2 / 3.2 / 3.2	140	0.7	20	13	Tri-Color
	598-8940-307F	Yellow / Green / Blue	AllnGaP / InGaN / InGaN	590 / 525 / 475	110 / 220 / 90	2 / 3.2 / 3.2	140	0.7	20	13	Tri-Color
1210 Series F	Package with Re	flector (3.0mm)	K 2.5mm X Hei	ght)							
	597-7701-507F	Red/Green	GaAsP/GaP	653/575	6.3 / 16	2.0/2.2	100	1.3	20	14	Bi-Color
	597-7721-507F	Yellow/Green	GaAsP/GaP	589/575	6.3 / 21	2.1/2.2	100	1.3	20	14	Bi-Color

# PLCC

PLCC	Dialight Part Number	Color	Material	Dom . Typ. (nm)	Intensity Typ. (mcd)	Forward Voltage Typ. (V)	Viewing Angle	Height	Test Current (mA)	Fig	Туре
PLCC-2 Serie	s Package with F	Reflector (3.5mm	n X 2.8mm X He	eight)							
	597-3001-207F	Red	GaAsP/GaP	620	10	2.0	120	1.9	20	24	Single Color
	597-3008-207F	Red	InGaAIP	630	12.6	1.8	120	1.9	2	24	Single Color
	597-3121-207F	Red	AlGaAs	645	35.5	1.75	120	1.9	10	24	Single Color
	597-3208-207F	Orange	InGaAIP	606	19.6	1.8	120	1.9	2	24	Single Color
	597-3211-207F	Orange	GaAsP/GaP	606	18.3	2.0	120	1.9	10	24	Single Color
	597-3231-207F	Yellow	AllnGaP	587	100	2.0	120	1.9	20	24	Single Color
	597-3301-207F	Green	GaAsP/GaP	570	19.6	2.0	120	1.9	10	24	Single Color
	597-3306-207F	Green	GaAIP	570	24	2.0	120	1.9	10	24	Single Color
	597-3308-207F	Green	InGaAIP	570	6.3	1.8	120	1.9	2	24	Single Color
	597-3401-207F	Yellow	GaAsP/GaP	587	12.6	2.0	120	1.9	10	24	Single Color
	597-3408-207F	Yellow	InGaAIP	587	15.7	1.8	120	1.9	2	24	Single Color
	597-3601-207F	Blue	InGaN	465	11	3.5	120	1.9	10	24	Single Color
	597-3901-207F	White	InGaN	x: 0.32 y: 0.31	135	3.5	120	1.9	20	24	Single Color
PLCC-4 Serie	s Package with F	Reflector (3.5mm	n X 2.8mm X He	eight)							
	597-3029-207F	Red	InGaAIP	625	1800	2.15	120	1.9	50	25	Single Color
	597-3209-207F	Orange	InGaAIP	606	2240	2.15	120	1.9	50	25	Single Color
	597-3329-207F	Green	InGaN	525	1800	3.4	120	1.9	30	25	Single Color
	597-3409-207F	Yellow	InGaAIP	589	1800	2.15	120	1.9	50	25	Single Color
	597-3609-207F	Blue	InGaN	469	450	3.4	120	1.9	30	25	Single Color
	597-3909-207F	White	InGaN	x:0.30, y:0.28	1600	3.3	120	1.9	30	25	Single Color
	597-7701-207F	Red/Green	GaAsP/GaP	628/570	11.3/11.3	2.0	120	1.9	10	26	Bi-Color
	597-7721-207F	Yellow/Green	Gap/GaAsP	590/570	16/16	2.1/2.0	120	1.9	20	26	Bi-Color
	597-7731-207F	Red/Yellow	GaAIP	628/590	10.5/10.5	2.0/2.0	120	1.9	10	26	Bi-Color
	597-7741-207F	Orange/Green	GaAsP/GaP	606/570	11.3/17.6	2.0	120	1.9	10	26	Bi-Color
	597-7752-007F	Red/Green	AllnGaP/InGaN	625/525	350/850	2.0/3.15	120	1.9	20	26	Bi-Color
	597-7761-207F	Orange/Green	GaAsP/GaP	605/557	11.3/17.6	2.0	120	1.9	10	26	Bi-Color
	597-7781-207F	Red/Blue	InGaAIP/GaN	633/467	45/11	2.0/3.5	120	1.9	10	26	Bi-Color
	597-7712-207F	Red/ Green/ Blue	AlinGaP/ InGaN/ InGaN	617/ 528/ 470	190/ 370/ 98	2/3.5/3.6	120	1.9	20	27	Tri-Color

## **Reverse Mount**

Reverse Mount	Dialight Part Number	Color	Material	Dom . Typ. (nm)	Intensity Typ. (mcd)	Forward Voltage Typ. (V)	Viewing Angle	Height	Test Current (mA)	Fig	Туре
1206 Series P	ackage (3.2mm	X 1.6 X Height)									
	597-6001-607F	Red	AllnGaP	631	150	2.0	70	1.1	20	28	Single Color
	597-6201-607F	Orange	AllnGaP	605	260	2.0	70	1.1	20	28	Single Color
	597-6301-607F	Green	InGaN	525	410	3.0	70	1.1	20	28	Single Color
	597-6401-607F	Yellow	AllnGaP	587	240	2.0	70	1.1	20	28	Single Color
	597-6501-607F	Yellow-Green	AllnGaP	572	104	2.2	70	1.1	20	28	Single Color
	597-6601-607F	Blue	InGaN	470	112	3.0	70	1.1	20	28	Single Color
	597-6901-607F	White	InGaN	x .304,y.301	70	3	70	1.1	5	28	Single Color
	597-7703-607F	Red/Green	AllnGaP	631/571	55/45	2.0	130	1.1	20	29	Bi-Color
	597-7783-607F	Red/Blue	AllnGaP/InGaN	631/470	45/45	2.0/3.3	130	1.1	20	29	Bi-Color

# Right Angle

Right Angle	Dialight Part Number	Color	Material	Dom .λ Typ. (nm)	Intensity Typ. (mcd)	Forward Voltage Typ. (V)	Viewing Angle	Height	Test Current (mA)	Fig	Туре
0605 Series Pa	ckage ( 1.6mm )	X 1.15mm X Hei	ght)								
	597-2003-507F	Red	AllnGaP	630	40	2.2	135	0.55	20	15	Single Color
	597-2033-507F	Red	AllnGaP	620	63	2.2	135	0.55	20	15	Single Color
	597-2203-507F	Orange	AllnGaP	605	100	2.2	135	0.55	20	15	Single Color
	597-2403-507F	Yellow	AllnGaP	590	63	2.0	135	0.55	30	15	Single Color
	597-2503-507F	Yellow-Green	AllnGaP	572	25	2.2	135	0.55	20	15	Single Color
	597-2603-507F	Blue	InGaN	470	140	3.2	140	0.55	20	15	Single Color
	597-2903-507F	White	InGaN	x: 0.31	170	3.1	150	0,55	10	15	Single Color
				y: 0.31		• • •					5g. 5 5 15 1
	597-2323-507F	Green	InGaN	527	56	3,0	140	0,55	5	15	Single Color



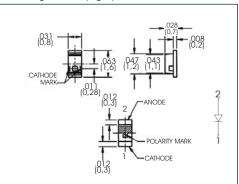
Right Angle	Dialight Part Number	Color	Material	Dom .λ Typ. (nm)	Intensity Typ. (mcd)	Forward Voltage Typ. (V)	Viewing Angle	Height	Test Current (mA)	Fig	Туре
1208 Series Po	ackaae (3.0mm	X 2.0mm X Heig	ht)								
1_0000000000000000000000000000000000000	597-2002-407F	Red	AllnGaP	626	50	1.9	130	1	20	16	Single Color
	597-2111-407F	Red	GaAlAs	647	12.4	1.7	130	1	20	16	Single Color
	597-2201-407F	Amber	GaAsP/GaP	606	3	2.2	130	1	20	16	Single Color
	597-2212-407F	Orange	AllnGaP	605	65	1.9	130	1	20	16	Single Color
	597-2222-407F	Yellow	AllnGaP	590	65	1.9	130	1	20	16	Single Color
				567	5.2	2.1	130	1	20		
	597-2311-407F 597-2401-407F	Green	GaP GaAsP/GaP	590	3	2.1	130	1	20	16 16	Single Color
	597-2401-407F	Yellow						1			Single Color
		Yellow	GaAsP/GaP	586	8.8	2.1	130	1	25	16	Single Color
	597-2002-607F	Red	AllnGaP	631	125	2.0	130	1	20	17	Single Color
	597-2211-607F	Orange	AllnGaP	605	125	2.0	130	1	20	17	Single Color
	597-2222-607F	Yellow	AllnGaP	589	125	2.0	130	1	20	17	Single Color
	597-2501-607F	Green	AllnGaP	572	50	2.0	130	<u> </u>	20	17	Single Color
	597-2601-607F	Green	InGaN	525	195	3.2	130	1	20	17	Single Color
	597-2901-607F	Blue	InGaN	470	125	3.0	130	1	20	17	Single Color
	597-2723-607F	Yellow/Green	AllnGaP	589/571	75/35	2.0	130	1	20	18	Bi-Color
	597-2751-607F	Red/Green	AllnGaP	631/571	45/35	2.0	130	1	20	18	Bi-Color
	597-2712-607F	Red/ Green/ Blue	AllnGaP/ InGaN/ InGaN	624/ 525/ 470	110/ 280/ 100	2/ 3.5/ 3.5	130	1	20	19	Tri-Color
1208 Series Po		X 1.5mm X Heig									
	598-8310-117F	Red	AllnGaP	635	40	2.2	160	1	20	20	Single Color
	598-8320-117F	Red-Orange	AllnGaP	625	150	2	160	1	20	20	Single Color
	598-8330-117F	Orange	AllnGaP	605	80	2	160	1	20	20	Single Color
	598-8340-117F	Yellow	AllnGaP	593	130	2	160	1	20	20	Single Color
	598-8350-117F	Yellow	AllnGaP	587	130	2	160	1	20	20	Single Color
	598-8360-117F	Yellow-Green	AllnGaP	573	40	2	160	1	20	20	Single Color
	598-8370-117F	Green	GaP	566	20	2	160	1	20	20	Single Color
	598-8380-117F	Green	InGan	523	220	3.2	160	1	20	20	Single Color
	598-8391-117F	Blue	InGan	473	90	3.2	160	1	20	20	Single Color
	598-8510-207F	Red / Green	AllnGaP	635 / 565	60 / 40	2/2	160	1	20	21	Bi-Color
	598-8520-207F	Red Orange / Green	AllnGaP	625 / 568	110 / 40	2	160	1	20	21	Bi-Color
-	598-8530-207F	Orange / Green	AllnGaP	605 / 568	100 / 40	2/2	160	1	20	21	Bi-Color
	598-8540-207F	_	AllnGaP	590 / 570	135 / 50	2/2	160	1	20	21	Bi-Color
		Yellow / Green	AllnGaP / InGaN	592 / 530	120 / 120	2/3.2	160	1	20	21	Bi-Color
	598-8560-207F	Yellow / Red	AllnGaP	590 / 640	135 / 50	2 / 2.2	160	1	20	21	Bi-Color
	598-8810-307F	Red / Green / Blue	AllnGaP / InGaN / InGaN	635 / 525 / 470	60 / 120 / 90	2 / 3.2 / 3.2	160	1	20	22	Tri-Color
	598-8820-307F	Red-Orange / Green / Blue	AllnGaP / InGaN / InGaN	625 / 525 / 470	120 / 150 / 60	2 / 3.2 / 3.2	160	1	20	22	Tri-Color  3 1 2
	598-8840-307F	Yellow / Green / Blue	AllnGaP / InGaN / InGaN	590 / 525 / 475	110 / 220 / 90	2 / 3.2 / 3.2	160	1	20	22	Tri-Color
1616 Series Po	ackage with Ref	lector (4mm X 4i	mm X Height)								
	597-2001-213F	Red	Gap/GaAsP	630	7.8	1.8	120	3.6	2	23	Single Color
	597-2201-815F	Yellow	AllnGaP	587	590	2.1	120	3.6	20	23	Single Color
	597-2301-213F	Green	GaP/GaP	570	5.6	1.8	120	3.6	2	23	Single Color
	597-2321-816F	Green	InGaN	528	627	3.5	120	3.6	20	23	Single Color
	597-2401-213F	Yellow	Gap/GaAsP	587	14	1.8	120	3.6	2	23	Single Color
	597-2301-824F	Green	AllnGaP	570	78	2.0	120	3.6	20	23	Single Color
	597-2601-817F	Blue	InGaN	470	157	3.6	120	3.6	20	23	Single Color
	597-2901-822F	White	InGaN	x: 0.33 y: 0.33	532	3.6	120	3.6	20	23	Single Color

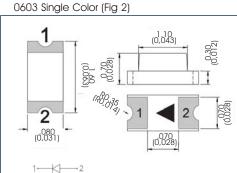


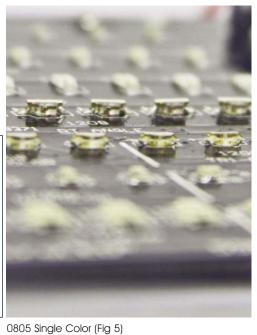
## **Drawings**

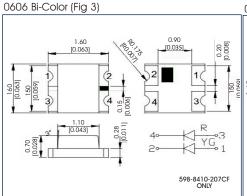
## Micro LED® SMD LED

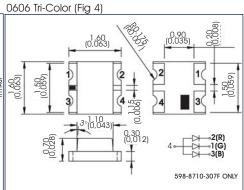
0603 Single Color (Fig 1)

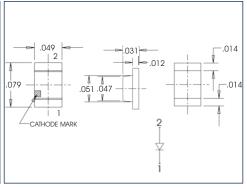


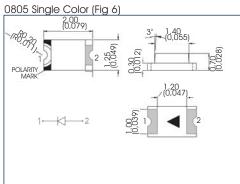


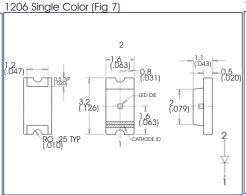


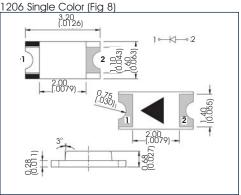


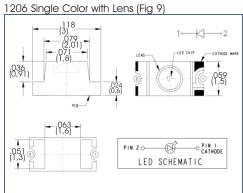


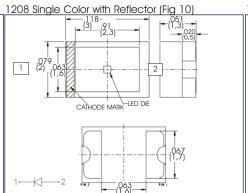


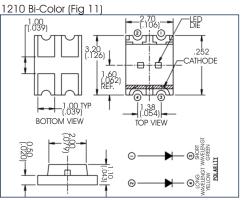








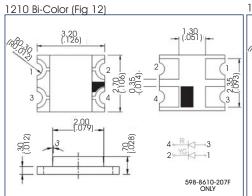


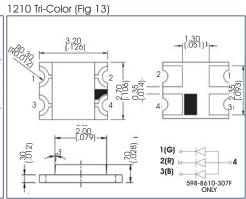


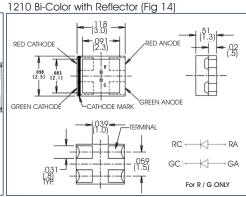


## **Drawings**

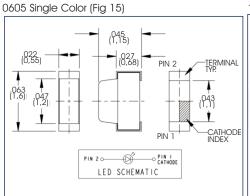
## Micro LED® SMD LED (cont.)

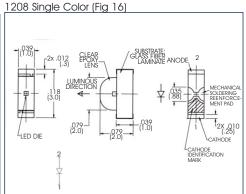


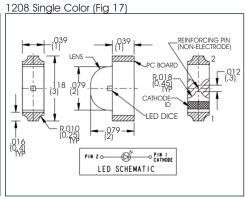


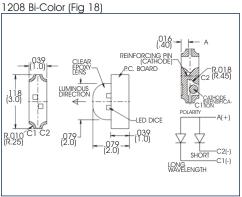


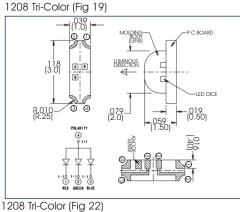
## **Right Angle**

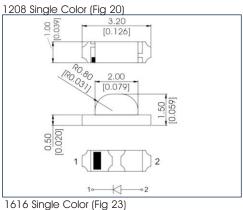


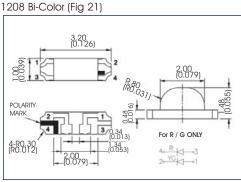


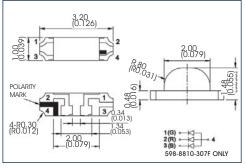


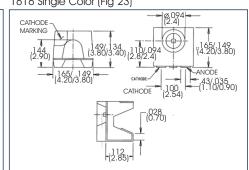








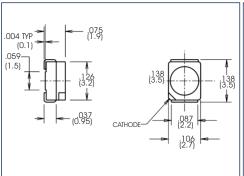




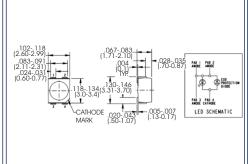
## **Drawings**

#### **PLCC**

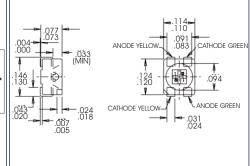
PLCC-2 Single Color (Fig 24)



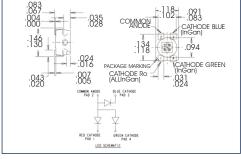
PLCC-4 Single Color (Fig 25)



PLCC-4 Bi-Color (Fig 26)

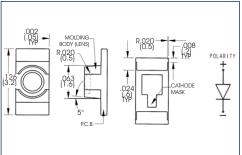


PLCC-4 Tri-Color (Fig 27)

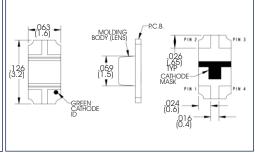


**Reverse Mount** 

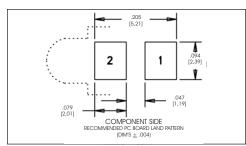
1206 Single Color (Fig 28)



1206 Bi-Color (Fig 29)



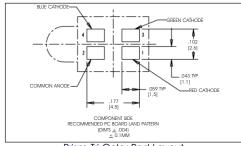
## 591 Prism® Color Pad Layouts (Page 3)



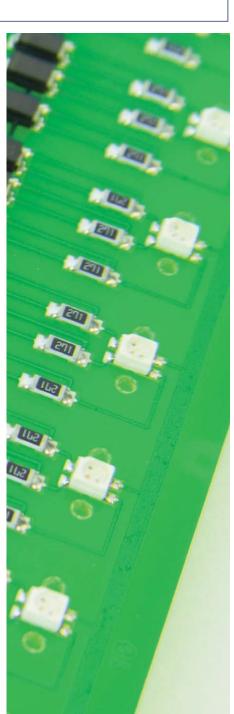
COMPONENT SIDE
RECOMMENDED PC BOARD LAND PATTERN
(DIM'S ± .004)
± 0.1MM

Prism Single Color Pad Layout

Prism Bi Color Pad Layout



Prism Tri Color Pad Layout





Color





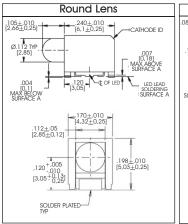


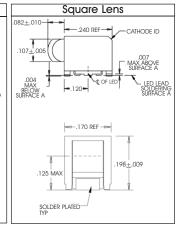
## 2mA Low Current Prism® CBI®

# Order Code 5 9 1 - 2 X 04 - X X X F Lens Type RoHS Compliant

Package Options

C	olor	Len	s Type	Packaging Type					
0	Red	0	Round	02	20 piece strip				
3	Green	1	Square	07	7" Reel dia. / 400pcs				
4	Yellow			13	13" Reel dia. / 1600pcs				
5	Orange				·				



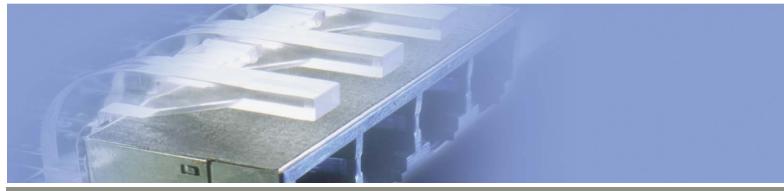


## **Low Current Surface Mount LED**





Low Current SMT LEDs	Dialight Part Number	Color	Material	Domλ Typ. (nm)	Intensity Typ. (mcd)	Forward Voltage Typ. (V)	Viewing Angle	Height	Test Current (mA)	Fig	Туре	
PLCC-2 Series Package with Reflector (3.5mm X 2.8mm X Height )												
	597-3008-207F	Red	InGaAIP	630	12.6	1.8	120	1.9	2mA	23	Single Color	
	597-3208-207F	Orange	InGaAIP	606	19.6	1.8	120	1.9	2mA	23	Single Color	
	597-3308-207F	Green	InGaAIP	570	6.3	1.8	120	1.9	2mA	23	Single Color	
	597-3408-207F	Yellow	InGaAIP	587	15.7	1.8	120	1.9	2mA	23	Single Color	
Right Angle - 1616	Series Package with	n Reflecto	or ( 4mm X 4m	m X Height)								
	597-2001-213F	Red	Gap/GaAsP	630	7.8	1.8	120	3.6	2mA	22	Single Color	
	597-2301-213F	Green	GaP/GaP	570	5.6	1.8	120	3.6	2mA	22	Single Color	
	597-2401-213F	Yellow	Gap/GaAsP	587	14	1.8	120	3.6	2mA	22	Single Color	
Reverse Mount - 1206 Series Package (3.2mm X 1.6 X Height)												
	597-6901-607F	White	InGaN	x .304,y.301	70	3	70	1.1	5ma	27	Single Color	



# Other Opto Electronic Products Offered by Dialight

# 40 Years of LED Experience

#### Through Hole CBI® Circuit Board Indicators



- > Perfect for direct view or backlighting applications
- ∨ Variety of colors and LED types including:
   Single & bi-color, diffused, water-clear, tinted, super-bright, & high efficiency
- Delta Over 2,500 variations, with custom LED placement available
- > RoHS compliant

#### **CBI®** Selector Guide

www.dialight.com/Assets/Brochures And Catalogs/Indication/CBI Selector Guide.pdf

#### Based LED Bulbs 585 & 586 Series



- Replaces traditional miniature incandescent bulbs with rugged long-lasting and energy-efficient LEDs
- Design incorporates the most common base styles including:
   T 1 <sup>3</sup>/<sub>4</sub> Midget Flange, Wedge Base and Bi-Pin, T 3 <sup>1</sup>/<sub>4</sub> Mini-Bayonet and Mini-Screw, T2 Telephone Slide and 15 mm Bayonet
- Voltages from 6, 14 and 28 VDC, 6-36 VDC multi-voltage operation and 125 VAC with non-polarized versions available
- Colors include − red, green, yellow, blue and white
- Check Dialight's Incandescent / Based LED Cross Reference for our specific replacement part number

#### Based LED Selector Guide

http://www.dialight.com/Assets/Brochures And Catalogs/Indication/Based LED selector guide.pdf

#### **LED Panel Mount Indicators**



- Variety of sizes from .156" − 1"
- Departing voltages 2-28 VDC, 125 and 230 VAC
- ight
  angle Some feature a water-tight seal to NEMA 4X / IP66
- > Available in red, green, yellow, orange, blue, cyan and white
- > Relampable Data Lamp series is available

#### LED Panel Mount Indicator Selector Guide

www.dialight.com/Assets/Brochures\_And\_Catalogs/Indication/VER-5x0x.pdf

#### Optopipe® Light Pipes for use with Micro LED® SMD



- ▷ Light pipes act as conduit for directing light from SMD to viewing angles
- > Provides ESD protection
- ▷ Allows edge lighting over and around a variety of components including SFP assemblies and RJ45 jacks
- > Standard and custom available
- > RoHS compliant

Optopipe® Light Pipes Selector Guide

www.dialight.com/Assets/Brochures And Catalogs/Indication/Lightpipe Selector Guide.pdf

