



592 SERIES

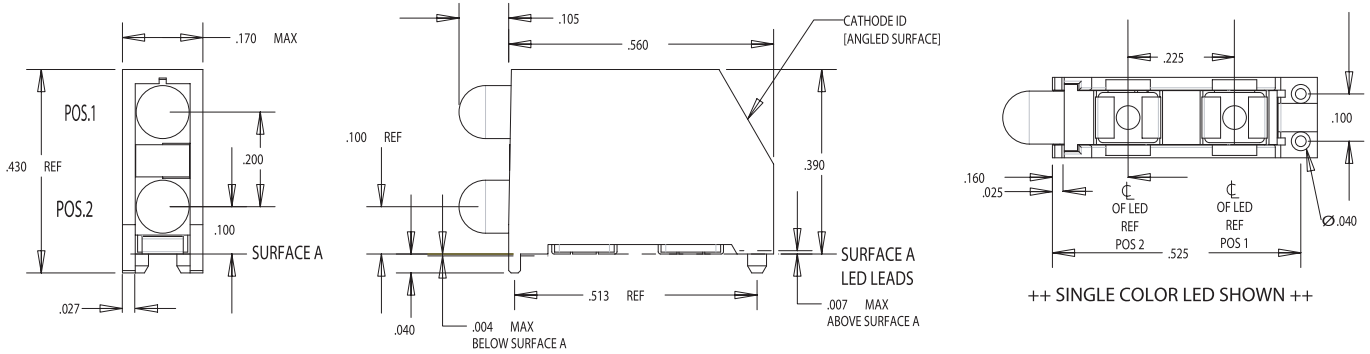
3mm Bi-level Prism® CBI® Surface Mount LED BRIGHT SINGLE COLOR



FEATURES / BENEFITS

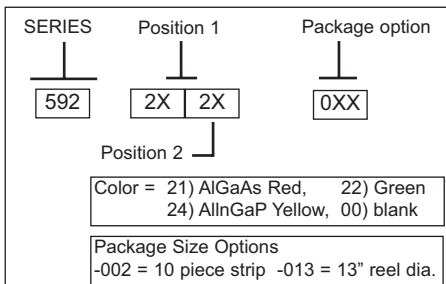
- ▲ Available as a Lead (Pb) Free product - RoHS Compliant.
- ▲ Incorporates latest LED technology, specifically designed for surface mounting.
- ▲ Compatible with automatic placement equipment.
- ▲ Compatible with surface mount reflow soldering processes.
- ▲ Black housing enhances contrast ratio.
- ▲ Housing material meet UL-94V-0 flammability ratings.
- ▲ Patented Bi-level design provides increased indication without increased space.
- ▲ Illumination areas compatible with industry standard 3mm through-hole Bi-level Circuit Board Indicators.
- ▲ Packaged in moisture barrier bags for dry packaging per IPC/JEDEC J-STD-033.
- ▲ Helps to eliminate mixed technology pc board processing.

SPECIFICATIONS



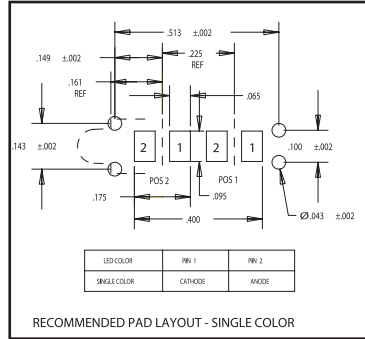
++ SINGLE COLOR LED SHOWN ++

PART NUMBER CODE*



PART NUMBER *	COLOR COMBO
592-2121-0XX	AlGaAs Red/AlGaAs Red
592-2222-0XX	GREEN/GREEN
592-2727-0XX	AllnGaP Yellow/AllnGaP Yellow

* Part Number with "F" suffix ending is a Lead (Pb) Free Product - RoHS Compliant.



RECOMMENDED PAD LAYOUT - SINGLE COLOR

Note: Custom color combinations available upon request. Check with factory for details.



Dialight Corporation
1501 Route 34 South • Farmingdale, NJ 07727 USA
Tel: (1) 732-919-3119 • Fax: (1) 732-751-5778 • www.dialight.com



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MDEF592D001_B



3mm Bi-level Prism[®] CBI[®] Surface Mount LED

ABSOLUTE MAXIMUM RATINGS (T_A= 25°C)

Parameter	21	22	27
COLOR	AlGaAs Red	Green	AllnGaP Yellow
POWER DISSIPATION (derate linearly from 25°C mW/°C)	100mW 0.8	100mW 0.6	100mW 0.6
FORWARD DC CURRENT	40mW	30mW	50mW
PEAK FORWARD CURRENT (10 µsec)	200mW	120mW	160mW
OPERATING TEMPERATURE	-55°C to +100°C		
STORAGE TEMPERATURE	-55°C to +100°C		
SOLDERING TEMPERATURES CONVECTION IR VAPOR PHASE	235°C Peak, above 185°C for 90 sec., 215°C for 3 min.		

OPERATING CHARACTERISTICS (T_A= 25°C)

Parameters	Part No.	Color	Min	Typ	Max	Units	Test Cond.
FORWARD VOLTAGE V _F	21	AlGaAs Red		1.8	2.4	V	I _F =10mA
	22	Green		2.1	2.6		
	27	AllnGaP Yellow		2	2.4		
REVERSE VOLTAGE V _R	21	AlGaAs Red	5			V	I _F =10µA
	22	Green	5				
	27	AllnGaP Yellow	5				
DOMINANT WAVELENGTH Dom	21	AlGaAs Red		638		nm	
	22	Green		569			
	27	AllnGaP Yellow		595			
LUMINOUS INTENSITY I _v	21	AlGaAs Red		23.9		mcd	I _F =10mA
	22	Green		9.1			
	27	AllnGaP Yellow		33.6			
VIEWING ANGLE (2θ _{1/2})	21	AlGaAs Red				deg.	
	22	Green					
	27	AllnGaP Yellow					

DIALIGHT RESERVES THE RIGHT TO MAKE CHANGES AT ANY TIME IN ORDER TO SUPPLY THE BEST PRODUCT POSSIBLE.



A4703



ISO 9001

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