



Micro LED

Surface Mount LED Selector Guide







A wide spectrum of package sizes, configurations, colors + More







Micro LED® Surface Mount LEDs



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, the series is available in a full range of colors and intensities, including the latest AllnGaP and InGaN technology. All products are RoHs compliant, and are perfectly suited to be used with Dialight's wide-range of Optopipe® 515 Series Light Pipes.

With such a wide variety of mounting styles, colors, intensities, viewing angles and lens features, the Micro LED® Surface Mount series is sure to include a cost-effective solution to any application.

Also available from Dialight

Prism® Surface Mount Indicators

591-595 Series Single, BiLevel & TriLevel SMDs

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 1.6mm, 2mm and 3mm lens size. The integral light pipes used in Prism® SMD LEDs are engineered for maximum light transmission and minimal light bleed while the diffused lens is also ideal for bicolor and tricolor applications where color-mixing is desired.

Features & Benefits

- Compatible with automatic placement equipment.
- · Compatible with surface mount reflow soldering processes.
- Housing meets UL-94V-0 flammability ratings.
- Patented design provides increased indication without increased space.
- Illumination areas compatible with industry standard 2 mm & 3 mm through hole CBIs.
- Packaged in dry packaging moisture barrier bags per IPC/JEDEC J-STD-033.
- Helps to eliminate mixed technology PC board processing.



Contact your Authorized Dialight Distributor or local Sales Representative for more information or samples.

http://www.dialightsignalsandcomponents.com/WhereToBuy/Optoelectronic

The following pages are organized as a product overview. Additional information is available at www.dialightsignalandcomponents.com including detailed specs and schematics, 3D models, and operating characteristics.



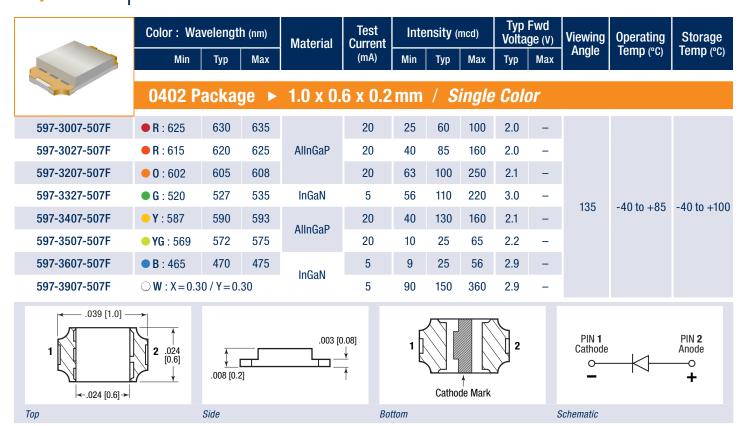
Micro LED® SMDs Typical Applications

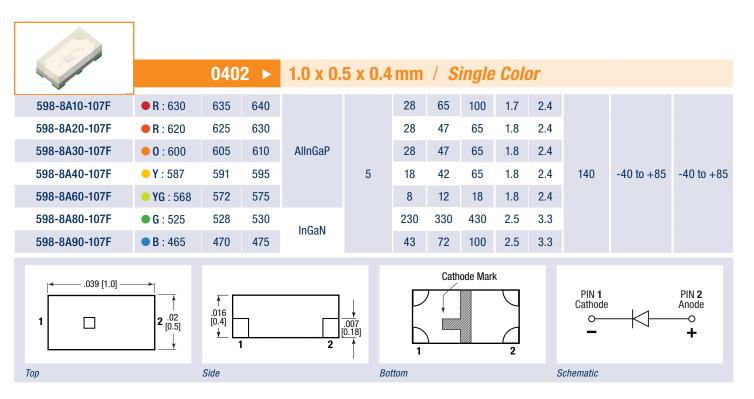
- Data center Infrastructure
- · Servers: Rack mount; blade; tower
- Storage: High-performance storage subsystems for high-end enterprise
- Storage Networking Hardware
- Fiber channel host bus adapter cards (HBAs); converged network adapter cards (CNAs); SCSi adapter cards; InfiniBand adapter cards
-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

Contents

Products are listed in this guide first by overall package size; then by variable heights from smallest to highest.

Top View SMDs
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1206
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1210
Mini PLCC-2
PLCC-2
PLCC-4
Reverse Mount
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Right Angle
0603
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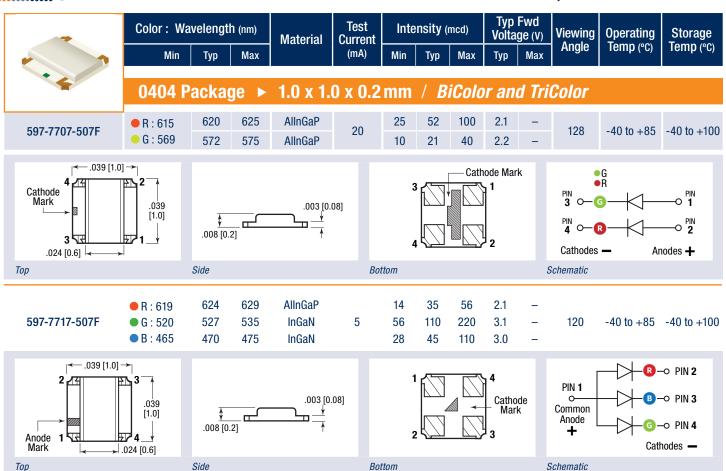


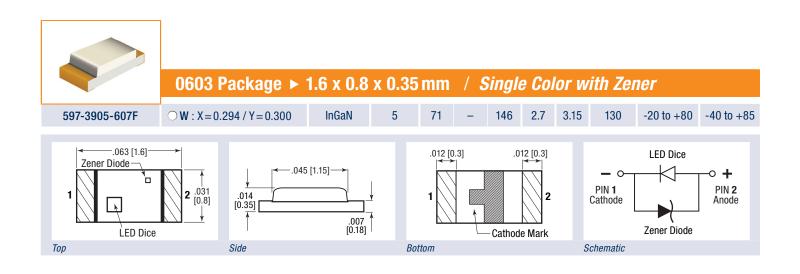
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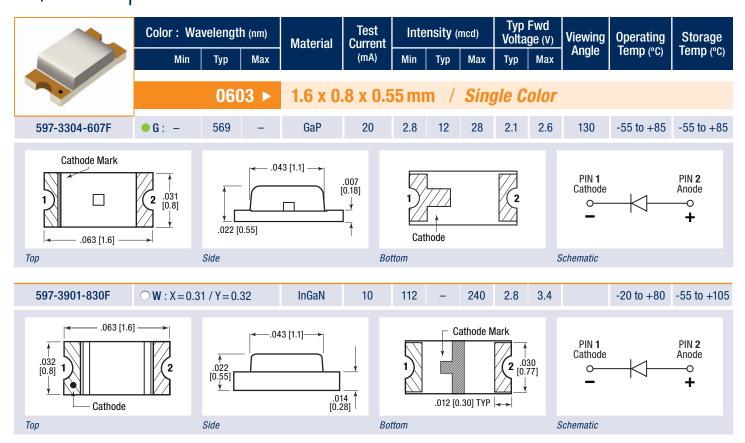
Top View SMDs are shown in the diagrams in top, side and bottom views. The top and bottom diagrams flip across the x-axis.

Тор

Top View | **0404 & 0603**

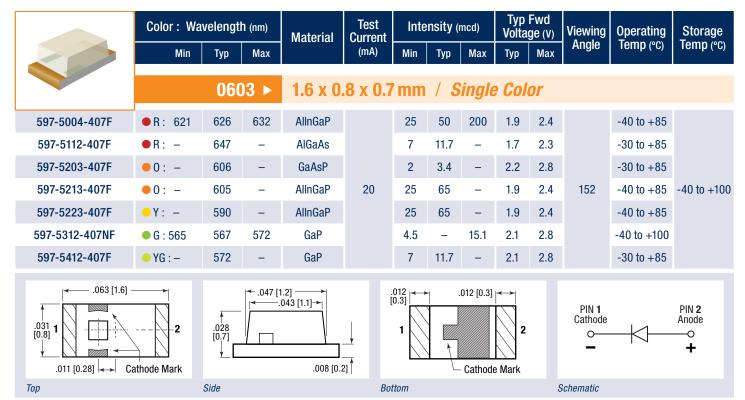


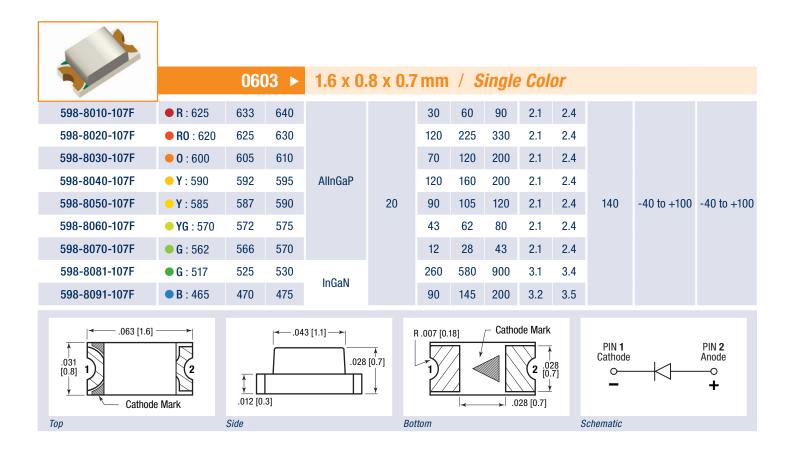


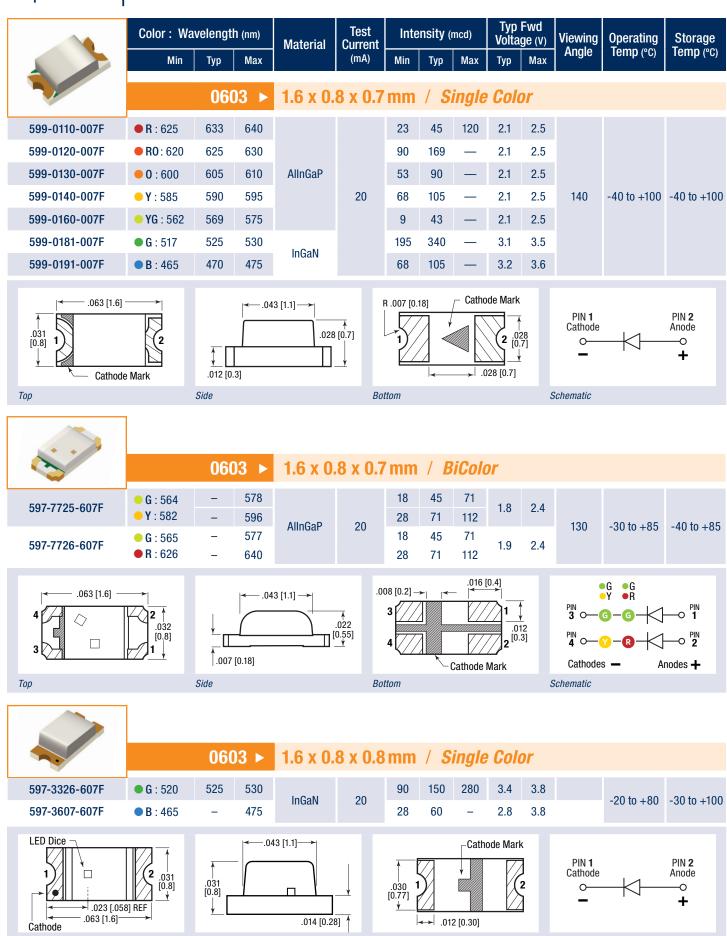












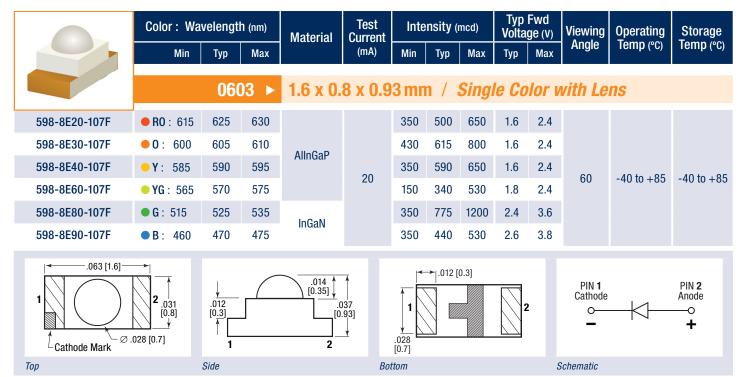
Bottom

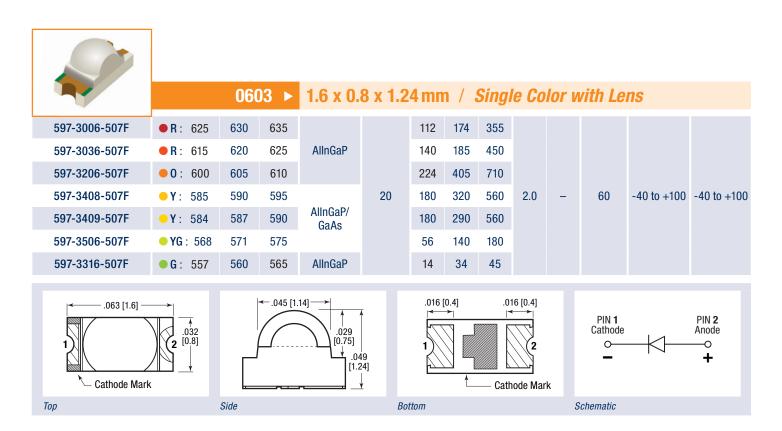
Schematic

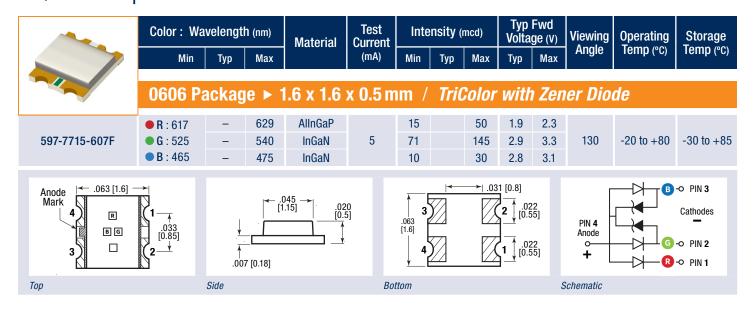
Top

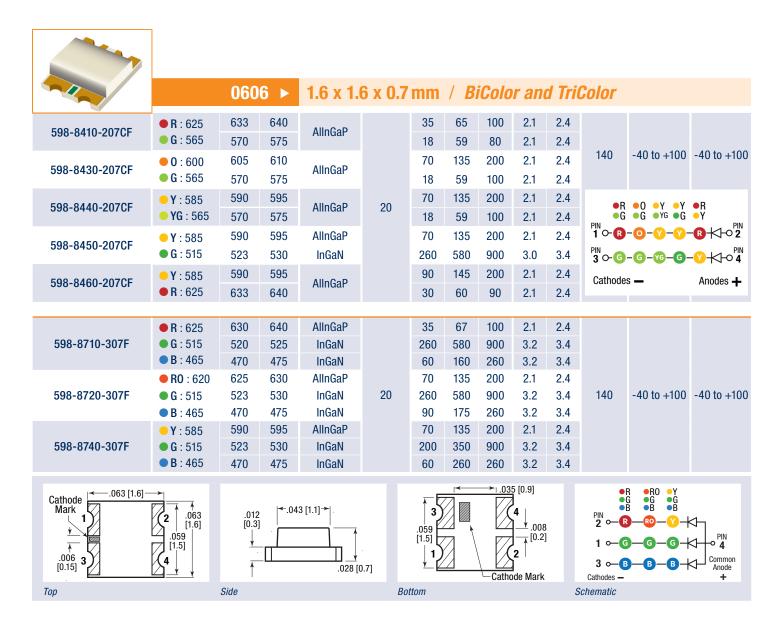
Side





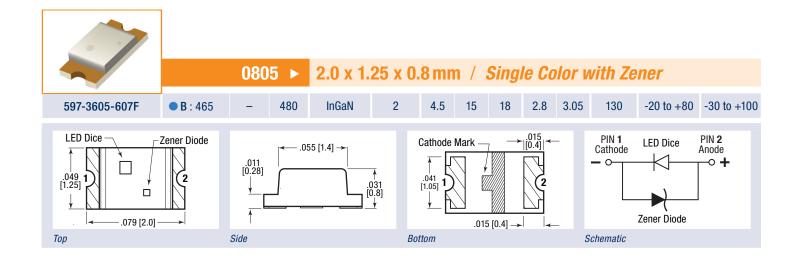








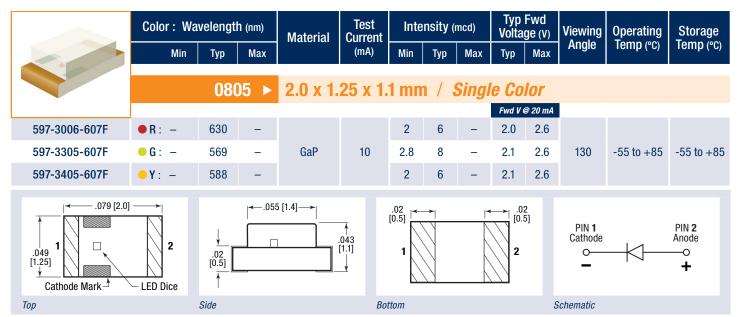
	Color: Wavelength (nm)			Material	Test Current	Intensity (mcd)			Typ Fwd Voltage (v)		Viewing	Operating	Storage
	Min	Тур	Max		(mA)	Min	Тур	Max	Тур	Max	Angle	Temp (°C)	Temp (°C)
	0805 P	acka	ge ►	2.0 x 1.	25 x 0.	7 mn	n /	Singl	le Co	lor			
598-8110-107F	● R : 625	633	640			20	55	90	2.1	2.4			
598-8120-107F	● RO : 620	625	630			120	190	260	2.1	2.4			
598-8130-107F	0 :600	605	610		20	70	165	260	2.1	2.4	140	-40 to +100	-40 to +100
598-8140-107F	Y : 590	592	595	AllnGaP		150	205	260	2.1	2.4			
598-8150-107F	Y : 585	587	590			90	120	150	2.1	2.4			
598-8160-107F	YG : 570	572	575			43	62	80	2.1	2.4			
598-8170-107F	G : 562	566	570			12	28	43	2.1	2.4			
598-8181-107F	● G : 520	525	530	InGaN		260	580	900	3.2	3.6			
598-8191-107F	● B: 465	470	475			90	145	200	3.2	3.6			
599-0110-007F	● R : 625	633	640			15	29	_	2.1	2.5			
599-0120-007F	● RO : 620	625	630		20	90	138	_	2.1	2.5	140	-40 to +100	-40 to +100
599-0130-007F	0 :600	605	610	AllnGaP		53	95	_	2.1	2.5			
599-0140-007F	Y : 585	590	595			68	112	_	2.1	2.5			
599-0160-007F	YG : 562	569	575			9	43	_	2.1	2.5			
599-0181-007F	● G : 520	525	530	InGaN		195	340	_	3.2	3.6			
599-0191-007F	● B: 465	470	475	maan		68	105	_	3.2	3.6			
.049 [1.25] 1 Polarity M	2 ark	.012 [0.	. [.028	<u> </u>	.008	03	3 [1.2]→	(2 .0	39 0]	PIN 1 Cathode	 -	PIN 2 Anode O
Тор		Side			Bot	tom				S	Schematic		

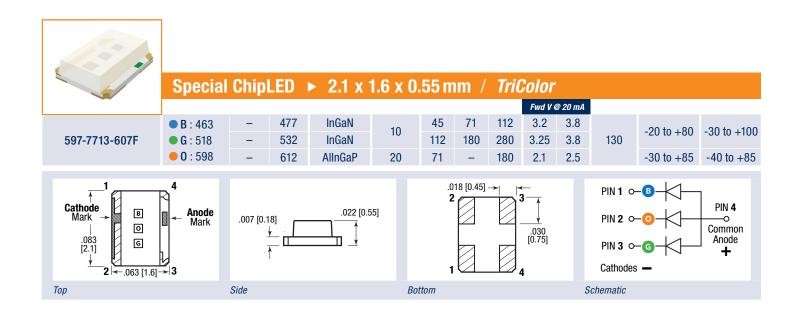


	Color : Wa	Color: Wavelength (nm)			Test Current	Intensity (mcd)			Typ Fwd Voltage (v)		Viewing		Storage
	Min	Тур	Max	Material	(mA)	Min	Тур	Max	Тур	Max	Angle	Temp (°C)	Temp (°C)
	0805 Pa	ckag	e >	2.0 x 1.2	5 x 0.8	3 mm	/ S	ingle	e Col	or			
597-3003-407F	● R : 620	626	632			68	91	120	1.9	2.4	140	-40 to +100	-40 to +100
597-3212-407NF	0 :603	605	609	AllnGaP		82	110	150	1.9	2.4	140	-40 to +100	-40 to +105
597-3222-407F	A : 583	590	597			25	65	105	1.9	2.4		-40 to +85	
597-5111-407F	● R : 642	647	653	AlGaAs	20	7.0	11.7	16.4	1.7	2.3			
597-5202-407F	0 :600	606	612			2.2	3.7	5.2	2.2	2.8	150	-30 to +85	-40 to +100
597-5311-407F	G : 562	567	573	GaP		3.8	6.4	9.0	2.1	2.8		-30 10 +00	
597-5411-407F	YG : 570	572	577			7	11.7	16.4	2.1	2.8			
Cathode Mark ← .051				[1.3] → 47 [1.2]→	1 .015 [0.4] 1 Cathode Mark			2 .01 [0.4	5 1]	PIN 1 Cathode		PIN 2 Anode	
Тор		Side			Во	ttom				5	Schematic		





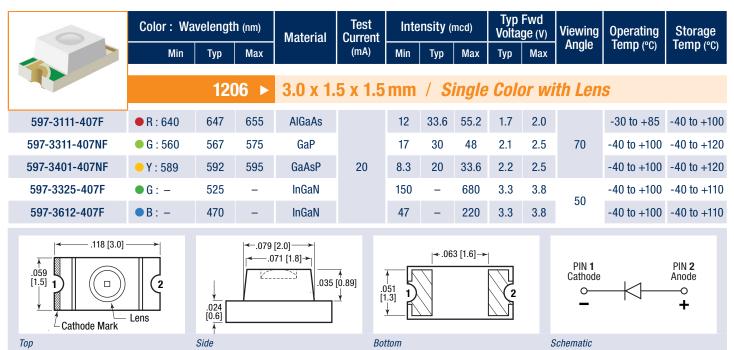


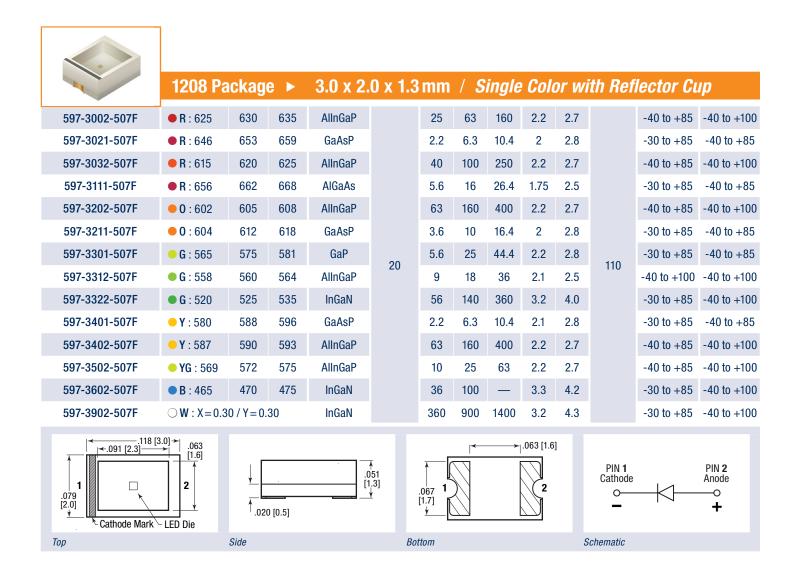


	Color: Wavelength (nm)			Material	Test Current	Intensity (mcd)			Typ Fwd Voltage (v)		Viewing	Operating	Storage
	Min	Тур	Max		(mA)	Min	Тур	Max	Тур	Max	Angle	Temp (°C)	Temp (°C)
	1206 Pa	ackag	e 🕨	3.2 x 1.6	6 x 0.7	mm	/ Si	ngle	Colo	r			
598-8210-107F	● R : 625	633	640			20	55	90	2.1	2.4	140	-40 to +100	-40 to +100
598-8220-107F	● R0 : 620	625	630			70	120	200	2.1	2.4			
598-8230-107F	0 :600	605	610			90	175	260	2.1	2.4			
598-8240-107F	Y : 590	592	595	AllnGaP		150	205	260	2.1	2.4			
598-8250-107F	Y :585	587	590		20	90	120	150	2.1	2.4			
598-8260-107F	YG : 570	572	575			43	70	100	2.1	2.4			
598-8270-107F	G : 562	566	570			18	30	43	2.1	2.4			
598-8281-107F	● G : 517	525	530	InGaN		260	580	900	3.2	3.5			
598-8291-107F	● B: 465	470	475			90	175	260	3.2	3.5			
599-0210-007F	● R : 625	633	640			15	29	_	2.1	2.5			
599-0220-007F	● R0 : 620	625	630		20	53	90	_	2.1	2.5	140	-40 to +100	-40 to +100
599-0230-007F	0 :600	605	610	AllnGaP		68	112	_	2.1	2.5			
599-0240-007F	Y: 585	587	590			68	126	_	2.1	2.5			
599-0260-007F	YG : 562	566	570			14	54	_	2.1	2.5			
599-0281-007F	● G :517	525	530			195	340	_	3.2	3.6			
599-0291-007F	● B : 465	470	475	InGaN		68	105	_	3.2	3.6			
.126 [3.2] — .063 [1.6] 1 — Cathode Mi	2 ark	.012 [0.3] ↓ ↓	.07	9 [2.0]	028	.055 1	✓✓✓.079	9 [2.0]	2		PIN 1 Cathode		PIN 2 Anode
Тор		Side			Во	ttom		-		5	Schematic		

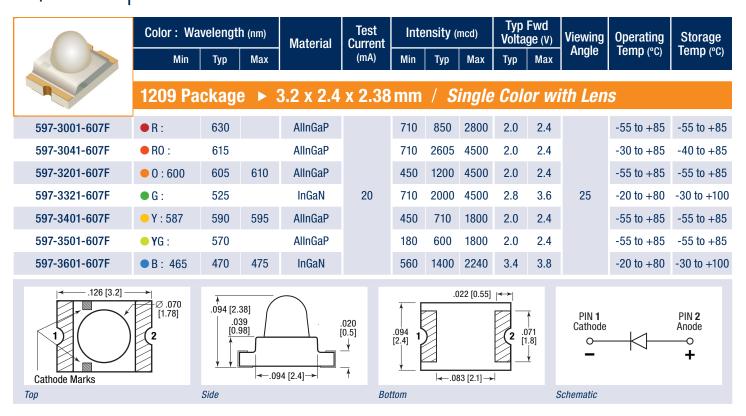






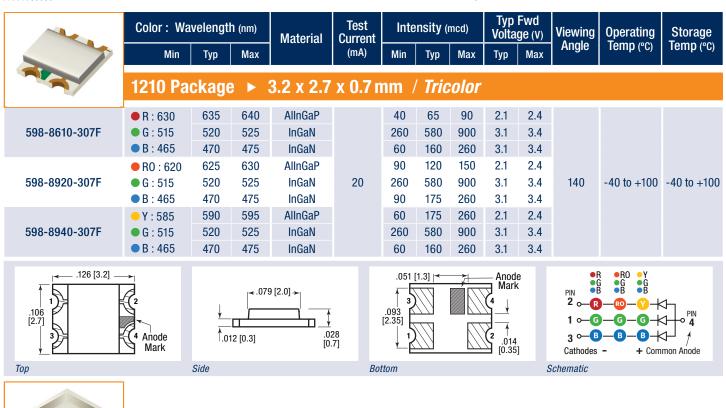


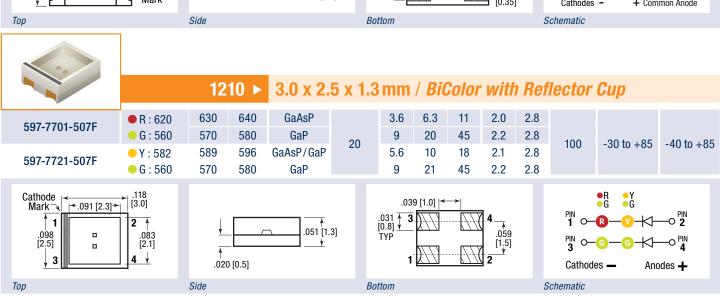
Top View | 1209 & 1210

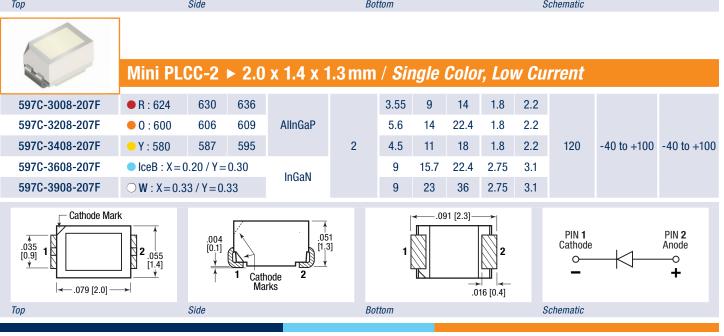




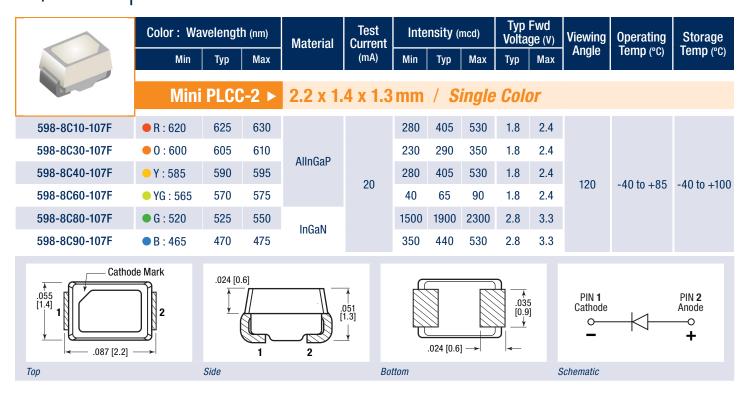
Top View | 1210 & Mini PLCC-2

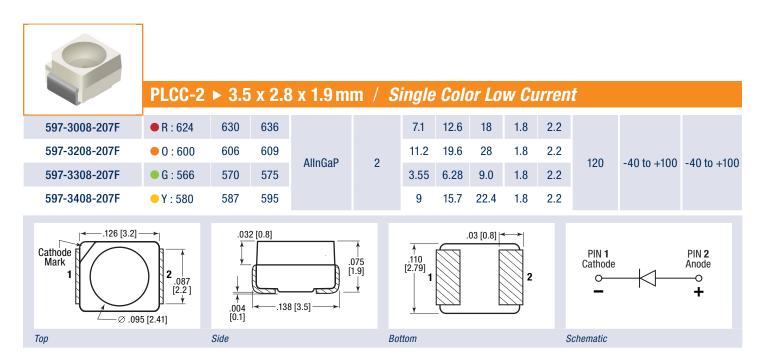




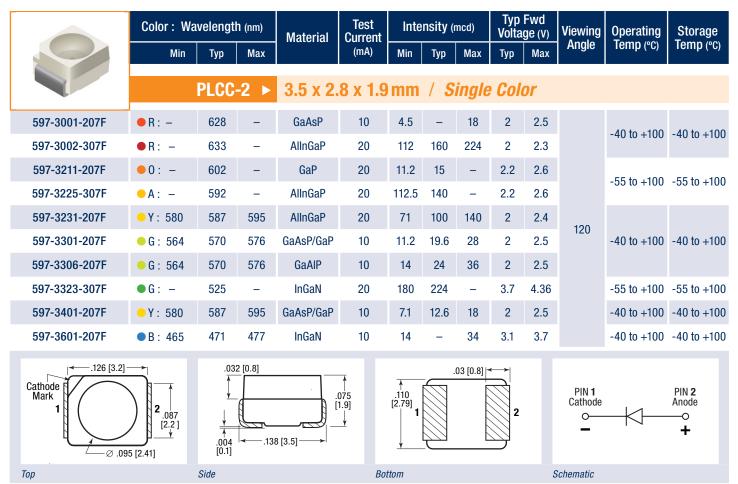


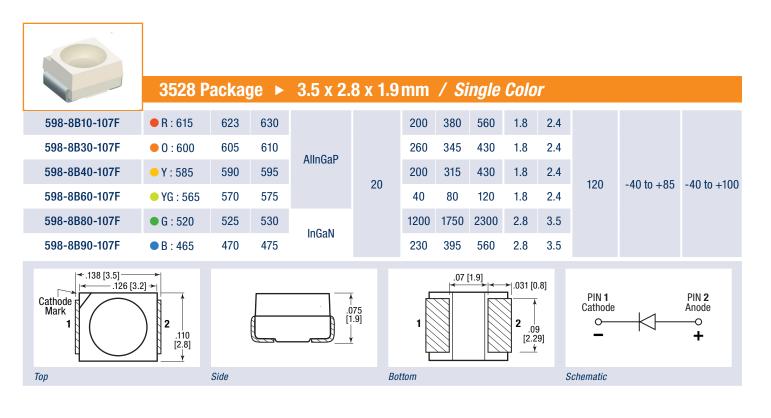
Top View | Mini PLCC-2 & PLCC-2



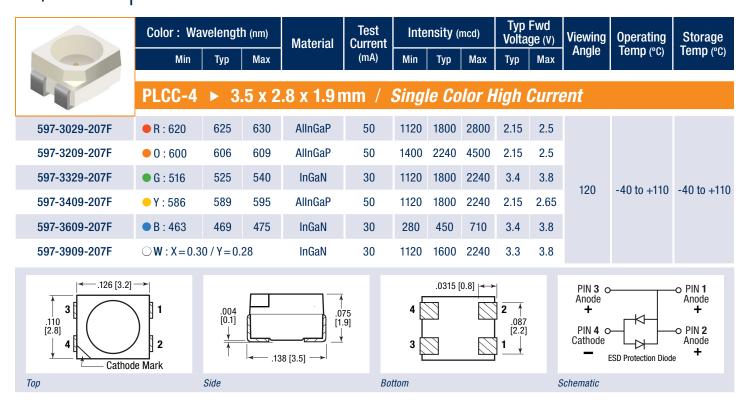


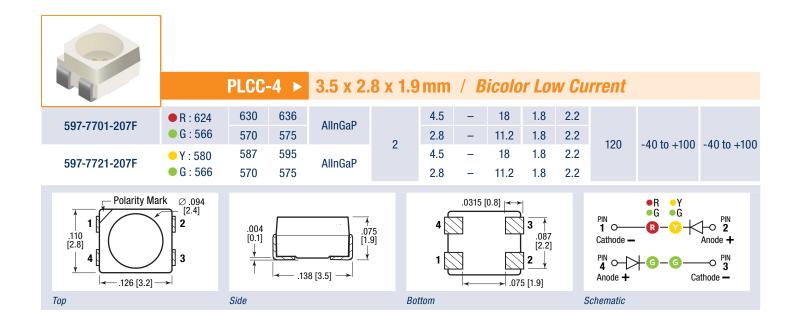
Top View | PLCC-2 & 3528

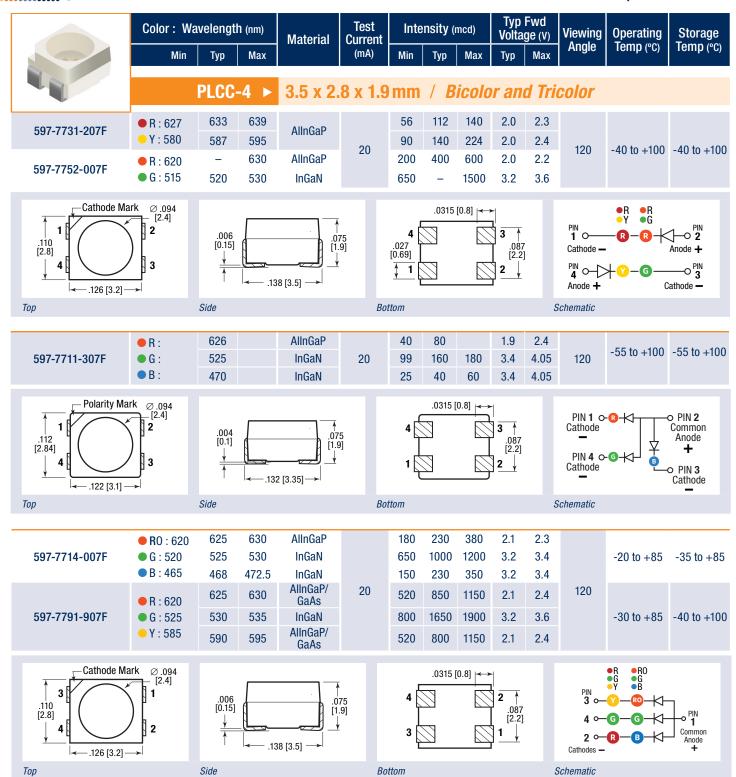




Top View | PLCC-4

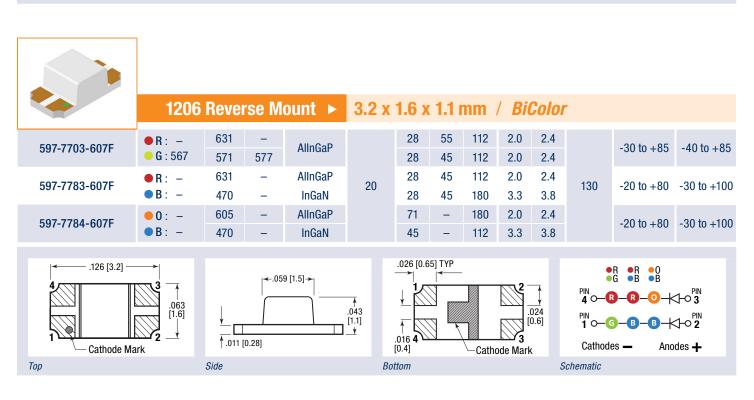




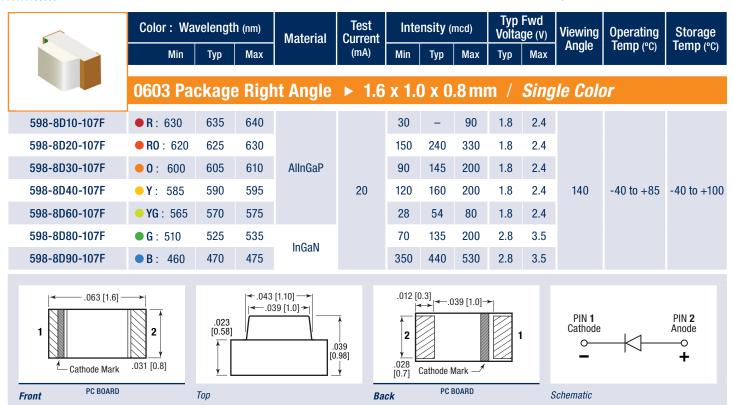


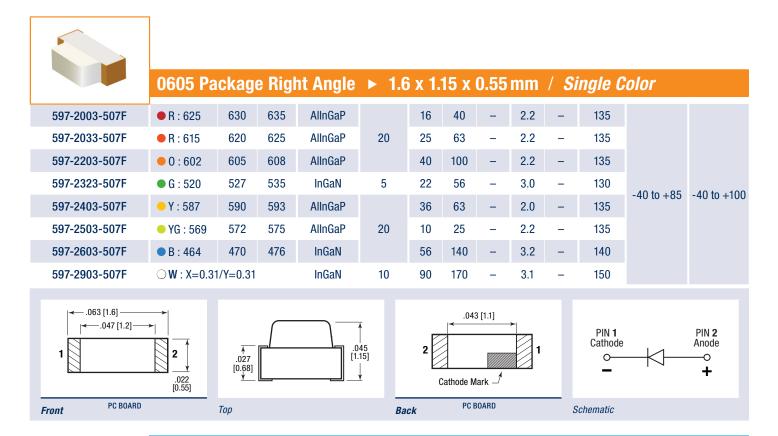
Reverse Mount | 1206





Right Angle | 0603 & 0605

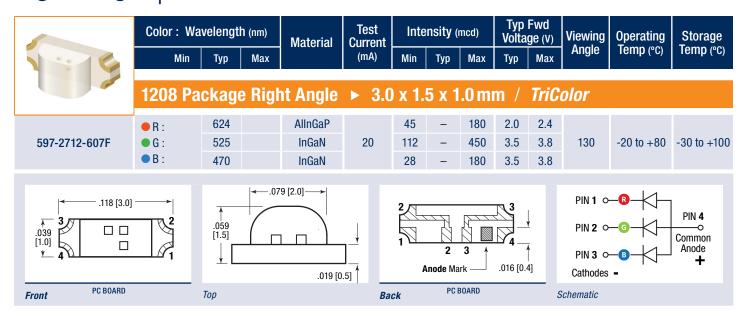




NOTE:

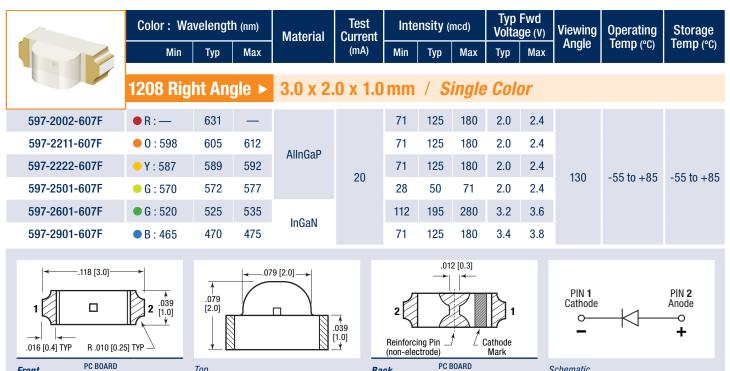
Right Angle SMDs are shown in the diagrams in front, top, and back views, with front and back oriented with the PCB below. The front and back diagrams flip across the y-axis.

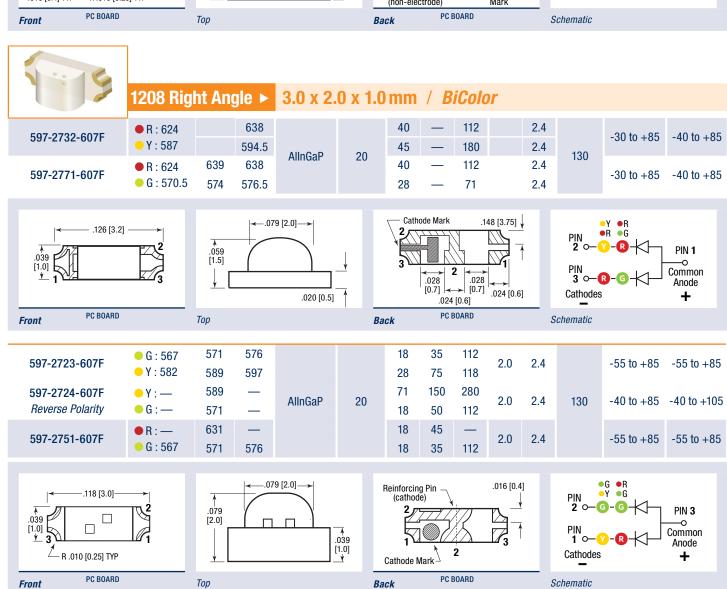
Right Angle | 1208







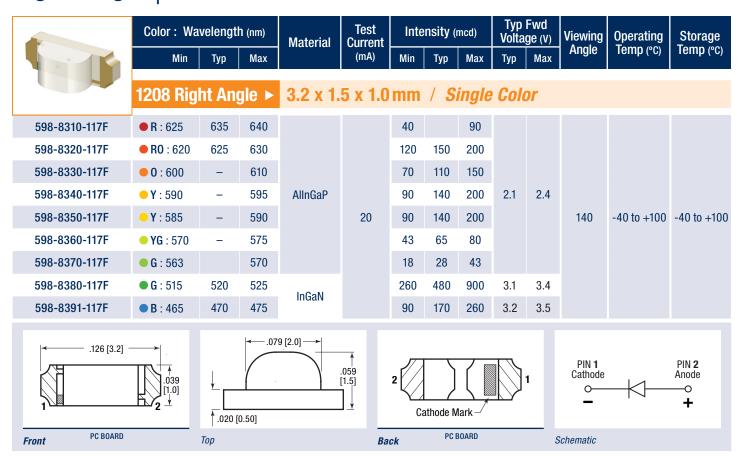


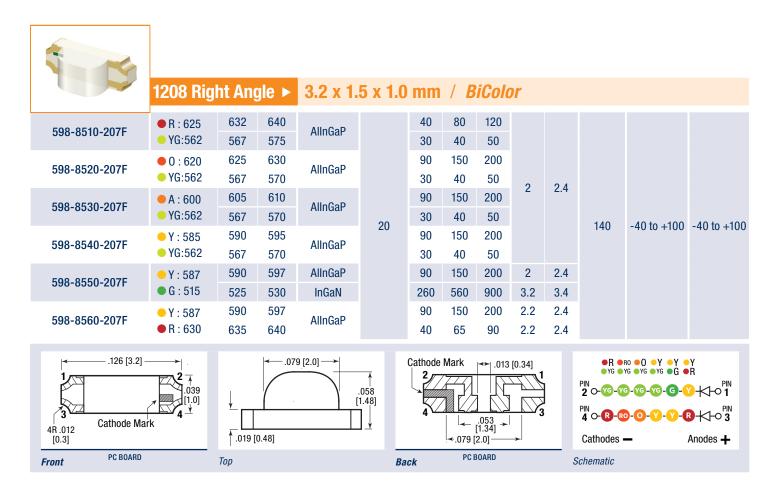


Back

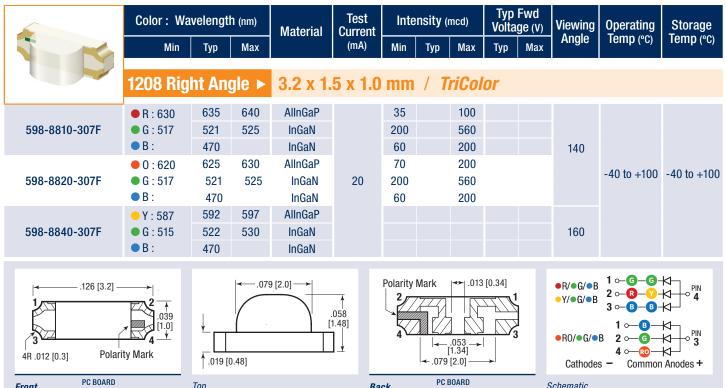
Front

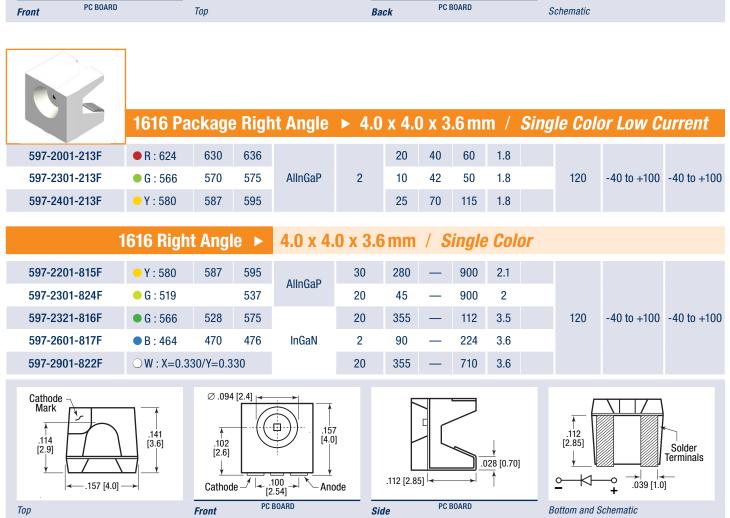
Right Angle | 1208













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Board Mount Indication



Prism® SMD



CBI® Through Hole



Optopipe® Light Pipes

Panel Mount Indication



Military & Relampable



LED PMI



Based LED Bulbs

The Most Reliable, The Most Options.

North American HQ

1501 Route 34 South Farmingdale, NJ 07727 Tel: 732.919.3119

info@dialightsignalsandcomponents.com

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