

LED Component



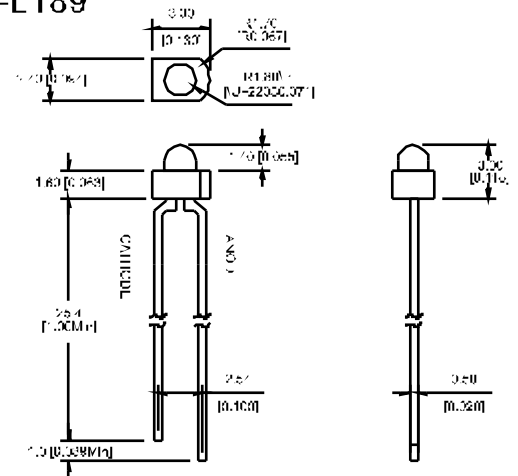
ROUND LED LAMP

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

1.8 mm Round Type LED Lamps.

Part No	Emit Color	λ P (nm)	Water / Clear	Typ. Min	Typ. Max	50
RI-L189UFC	Ultra Orange	630			120	
BL-L189UYC	Ultra Yellow	590		150	600	
BL-L189UGC	Ultra Green	574		50	300	
BL-L189PGC	Ultra Pure Green	525	Water	400	1200	
BL-L189BGC	Ultra Bluish Green	505	Clear	400	1000	
RI-L189URC	Ultra Blue	470		400	1200	
BL-L189UWC	Ultra White	/		400	2500	

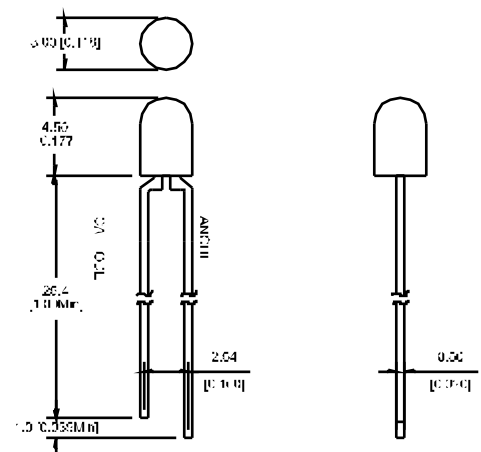
BL-L189



3.0 mm Round Type LED Lamps.

Part No	Emit Color	λ P (nm)	Water / Clear	Typ. Min	Typ. Max	30
RI-L304UFC	Ultra Orange	630			900	
BL-L304UYC	Ultra Yellow	590		900	2000	
BL-L304UGC	Ultra Green	574		220	600	
BL-L304PGC	Ultra Pure Green	525	Water	1200	3000	
BL-L304BGC	Ultra Bluish Green	505	Clear	900	2800	
RI-L304URC	Ultra Blue	470		500	1400	
BL-L304UWC	Ultra White	/		900	2000	

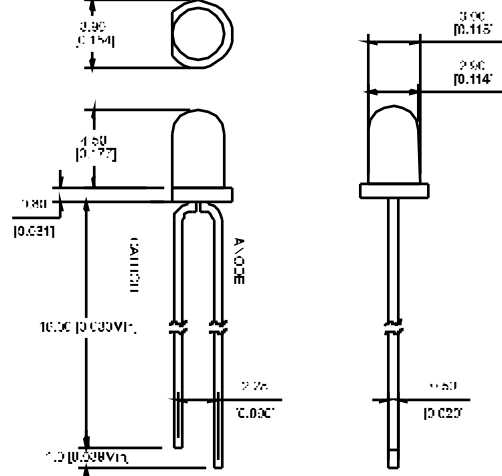
BL-L304



3.0 mm Round Type LED Lamps.

Part No	Emit Color	λ P (nm)	Water / Clear	Typ. Min	Typ. Max	30
BL-L312UEC	Ultra Orange	630			900	
BL-L312UYC	Ultra Yellow	590		900	2000	
RI-L312UGC	Ultra Green	574		220	600	
BL-L312PGC	Ultra Pure Green	525	Water	1200	3000	
BL-L312BGC	Ultra Bluish Green	505	Clear	900	2800	
BL-L312UBC	Ultra Blue	470		500	1400	
BL-L312UWC	Ultra White	/		900	2000	

BL-L312



All dimensions are in millimeters (inches)
Tolerance is ±0.25(0.01") unless otherwise noted.
Specifications are subject to change without notice.

LED Component

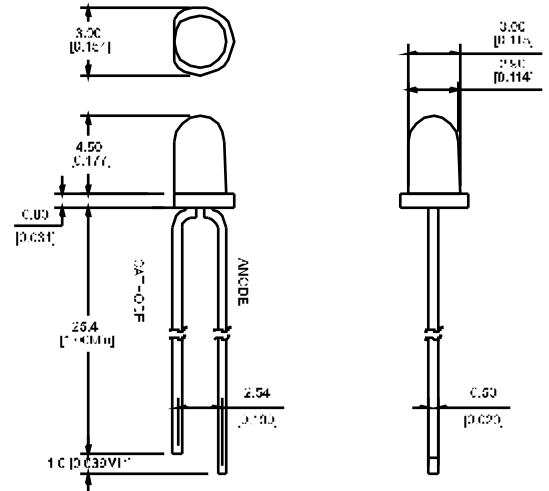
ROUND LED LAMP

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

1.8 mm Round Type LED Lamps.

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle
Min	Typ.					
BL-L314SRC	Hi Red	660	Water Clear	50	220	30
BL-L314LRC	Super Red	660		200	500	
BL-L314URC	Ultra Red	660		500	900	
BL-L314UEC	Ultra Orange	630		900	1800	
BL-L314UYC	Ultra Yellow	590		900	2000	
BL-L314UGC	Ultra Green	574		220	600	
BL-L314PGC	Ultra Pure Green	525		1200	3000	
BL-L314BGC	Ultra Bluish Green	505		900	2800	
BL-L314UBC	Ultra Blue	470		500	1400	
BL-L314UVC	UV	405		100	150	
BL-L314UWC	Ultra White	/		900	2000	
BL-L314SRC	Hi Red	660	11.75mm	10	60	60
BL-L314LRC	Super Red	660		30	100	
BL-L314URC	Ultra Red	660		50	200	
BL-L314UEC	Ultra Orange	630		100	250	
BL-L314UYC	Ultra Yellow	590		100	300	
BL-L314UGC	Ultra Green	574		100	300	
BL-L314PGC	Ultra Pure Green	525		35	80	
BL-L314BGC	Ultra Bluish Green	505		350	800	
BL-L314UBC	Ultra Blue	470		200	700	
BL-L314UWC	Ultra White	/		800	1800	

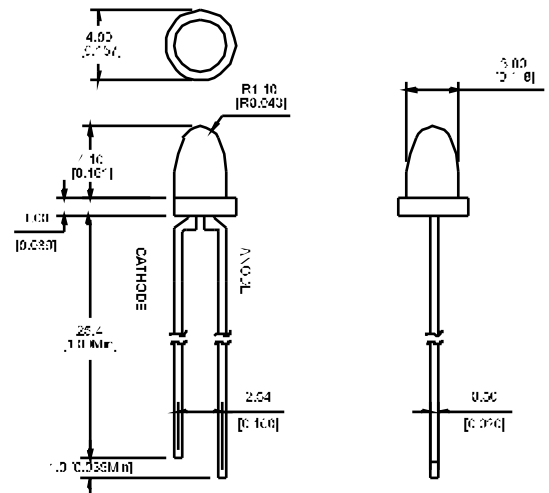
BL-L314



3.0mm Round Bullet Type LED Lamps

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle
Min	Typ.					
BL-L324URC	Ultra Orange	630	Water Clear	1200	2500	12
BL-L324UYC	Ultra Yellow	590		500	2000	
BL-L324UGC	Ultra Green	574		500	1800	
BL-L324PGC	Ultra Pure Green	525		2000	5000	
BL-L324BGC	Ultra Bluish Green	505		1200	4500	
BL-L324UBC	Ultra Blue	470		2000	4000	
BL-L324UWC	Ultra White	/	3000	10000		

BL-L324



LED Component

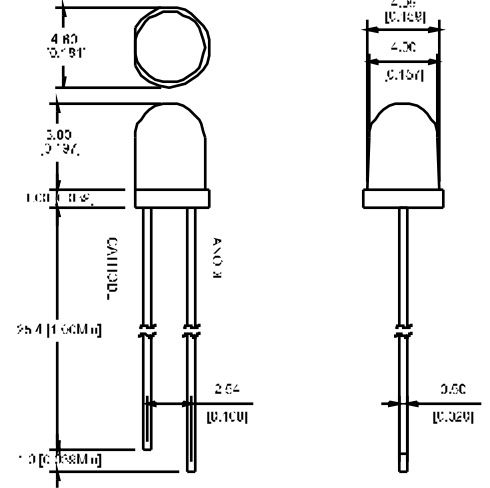
ROUND LED LAMP

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

4.0mm Round Type LED Lamps

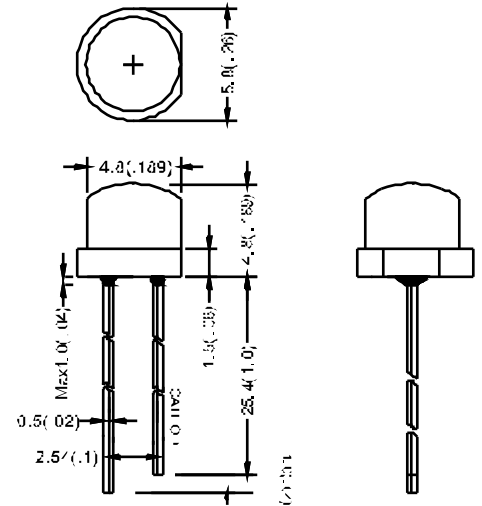
Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd) Min	Iv(mcd) Typ.	Viewing Angle
BL-L413UEC	Ultra Orange	630	Water Clear	900	1800	25
BL-L413UYC	Ultra Yellow	590		900	2100	
BL-L413UGC	Ultra Green	574		220	650	
BL-L413PGC	Ultra Pure Green	525		1200	4000	
BL-L413BGC	Ultra Bluish Green	505		900	3500	
BL-L413UBC	Ultra Blue	470		500	4000	
BL-L413UWC	Ultra White	/	3000	10000		

BL-L413



4.8mm Round-Helmet Type LED Lamp

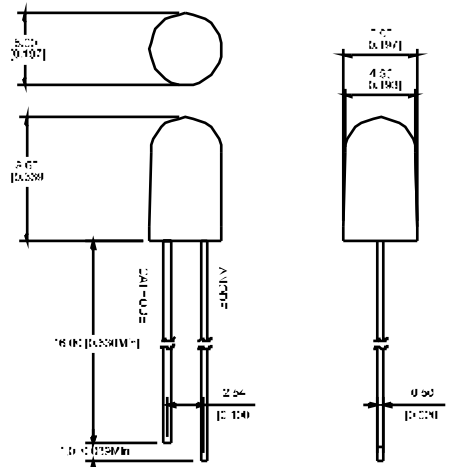
Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd) Min	Iv(mcd) Typ.	Viewing Angle
BL-L48UEC	Ultra Orange	630	Water Clear	200	500	80
BL-L48LYC	Ultra Yellow	590		200	500	
BL-L48LGC	Ultra Green	574		140	300	
BL-L48PGC	Ultra Pure Green	525		500	1000	
BL-L48BGC	Ultra Bluish Green	505		300	700	
BL-L48LWC	Ultra White	470		500	1200	
BL-L48LWC	Ultra White	/	3000	10000		



5mm Round LED Lamps

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd) Min	Iv(mcd) Typ.	Viewing Angle
BL-L502UEC	Ultra Orange	630	Water Clear	800	2000	20
BL-L502UYC	Ultra Yellow	590		1000	2200	
BL-L502UGC	Ultra Green	574		300	700	
BL-L502PGC	Ultra Pure Green	525		2000	5000	
BL-L502BGC	Ultra Bluish Green	505		1800	4000	
BL-L502UBC	Ultra White	470		2000	5000	
BL-L502UWC	Ultra White	/	3000	10000		

BL-L502



All dimensions are in millimeters (inches)
Tolerance is ±0.25(0.01") unless otherwise noted.
Specifications are subject to change without notice.

LED Component

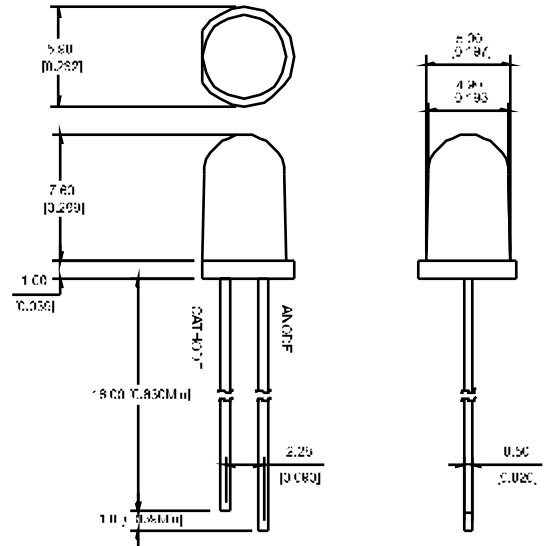
ROUND LED LAMP

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

5mm Round LED Lamps.

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd) Min	Iv(mcd) Typ.	Viewing Angle
BL-L5*2UEC	Ultra Orange	630	Water	800	2000	20
BL-L5*2UYC	Ultra Yellow	590		1000	2200	
BL-L5*2UGC	Ultra Green	574	Clear	300	700	
BL-L5*2PGC	Ultra Pure Green	525		2000	5000	
BL-L5*2BGC	Ultra Bluish Green	505	1800	4000		
BL-L5*2UBC	Ultra Blue	470	2000	5000		
BL-L5*2UWC	Ultra White	/	3000	10000		

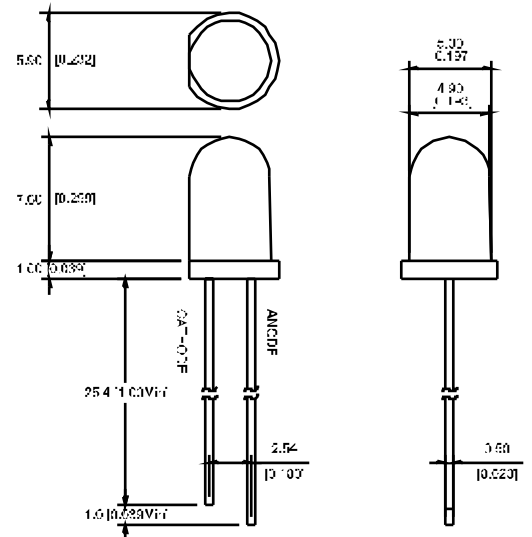
BL-L512



5mm Round LED Lamps.

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd) Min	Iv(mcd) Typ.	Viewing Angle
BL-L513SRC	Hi Red	660	Water	50	250	20
BL-L513RC	Super Red	660		250	800	
BL-L513URC	Ultra Red	660		600	1000	
BL-L513UEC	Ultra Orange	630		800	2000	
BL-L513UYC	Ultra Yellow	590		1000	2200	
BL-L513UYOC	Ultra Yellow	619		1000	2200	
BL-L513UGC	Ultra Green	574		300	700	
BL-L513PGC	Ultra Pure Green	525		2000	5000	
BL-L513BGC	Ultra Bluish Green	505		1800	4000	
BL-L513UBC	Ultra Blue	470		2000	5000	
BL-L513UVC	UV	405	80	150		
BL-L513UWC	Ultra White	/	3000	10000		
BL-L513SRD	Hi Red	660	Diffused	20	80	60
BL-L513LRD	Super Red	660		50	120	
BL-L513URD	Ultra Red	660		100	220	
BL-L513UED	Ultra Orange	630		120	300	
BL-L513UYD	Ultra Yellow	590		120	320	
BL-L513UYOD	Ultra Yellow	619		120	320	
BL-L513UGD	Ultra Green	574		45	100	
BL-L513PGD	Ultra Pure Green	525		400	900	
BL-L513BGD	Ultra Bluish Green	505		300	800	
BL-L513UBD	Ultra Blue	470		400	900	
BL-L513UWW	Ultra White	/	1000	2000		

BL-L513



All dimensions are in millimeters (inches)
Tolerance is ±0.25(0.01") unless otherwise noted.
Specifications are subject to change without notice.

LED Component

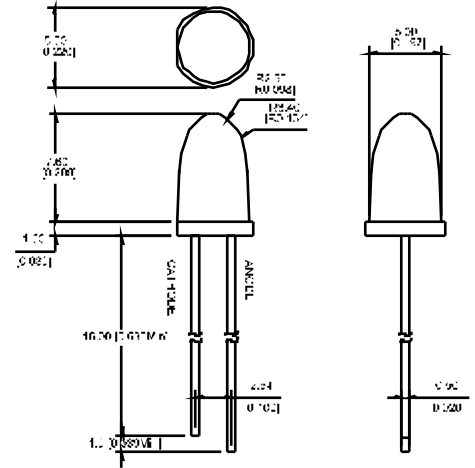
ROUND LED LAMP

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

5.0mm Round-Helmet Type LED Lamps.

Part No	Emit Color	λ P (nm)	Lens Type	Iv (mcd)	Iv (mcd)	Viewing Angle
				Min	Typ.	
RI-L522UFC	Ultra Orange	630	Water Clear	1000	2500	15
BL-L522UYC	Ultra Yellow	590		1000	2200	
BL-L522UGC	Ultra Green	574		400	1000	
BL-L522PGC	Ultra Pure Green	525		3000	5000	
BL-L522BGC	Ultra Bluish Green	505		2000	5000	
RI-L522URC	Ultra Blue	470		2200	5000	
BL-L522UWC	Ultra White	/		5000	15000	

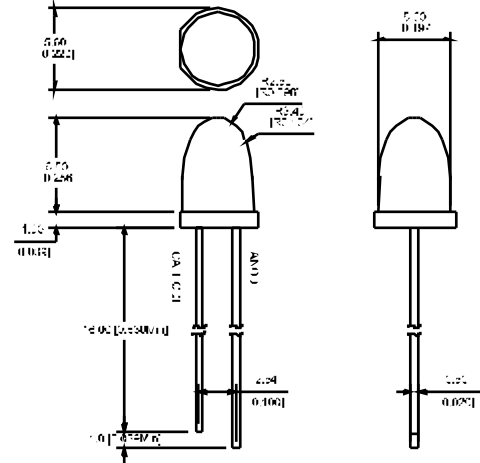
BL-L522



5.0mm Round-Helmet Type LED Lamps, with lower profile

Part No	Emit Color	λ P (nm)	Lens Type	Iv (mcd)	Iv (mcd)	Viewing Angle
				Min	Typ.	
BL-L523UEC	Ultra Orange	630	Water Clear	900	2400	18
BL-L523UYC	Ultra Yellow	590		900	2100	
BL-L523UGC	Ultra Green	574		300	900	
BL-L523PGC	Ultra Pure Green	525		2000	5000	
BL-L523BGC	Ultra Bluish Green	505		1800	4000	
BL-L523UBC	Ultra Blue	470		2000	5500	
BL-L523UWC	Ultra White	/		4500	12000	

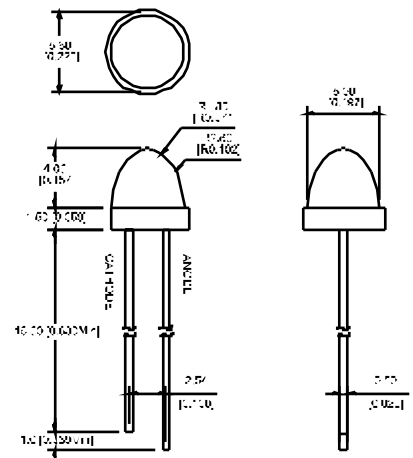
BL-L523



5.0mm Round-Helmet Type LED Lamps, with lower Profile

Part No	Emit Color	λ P (nm)	Lens Type	Iv (mcd)	Iv (mcd)	Viewing Angle
				Min	Typ.	
BL-L524UEC	Ultra Orange	630	Water Clear	800	1800	20
BL-L524UYC	Ultra Yellow	590		800	1500	
RI-L524UGC	Ultra Green	574		300	800	
BL-L524PGC	Ultra Pure Green	525		1500	3000	
BL-L524BGC	Ultra Bluish Green	505		1000	2700	
BL-L524UBC	Ultra Blue	470		1200	2500	
BL-L524UWC	Ultra White	/		3000	10000	

BL-L524



All dimensions are in millimeters (inches)
Tolerance is ±0.25(0.01") unless otherwise noted.
Specifications are subject to change without notice.

LED Component

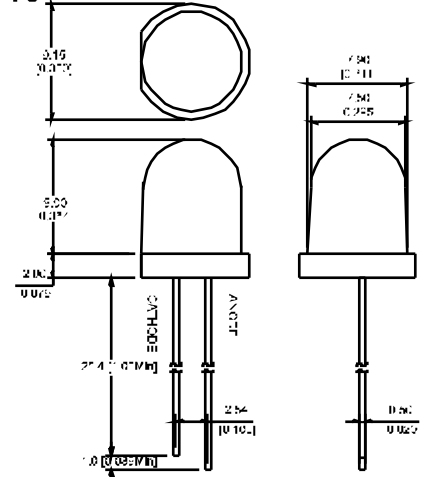
ROUND LED LAMP

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

8mm Round LED Lamps.

Part No	Emit Color	λ P (nm)	Water / Clear	800	1500	25
BL-LB*3UYC	Ultra Yellow	590			600	
BL-LB*3UGC	Ultra Green	574		200	700	
BL-LB*3PGC	Ultra Pure Green	525	Water	1000	5000	
BL-LB*3BGC	Ultra Blu sh Green	505	Clear	800	4000	
BL-LB*3URC	Ultra Blue	470		800	2000	
BL-LB*3UWC	Ultra White	/		1000	5000	

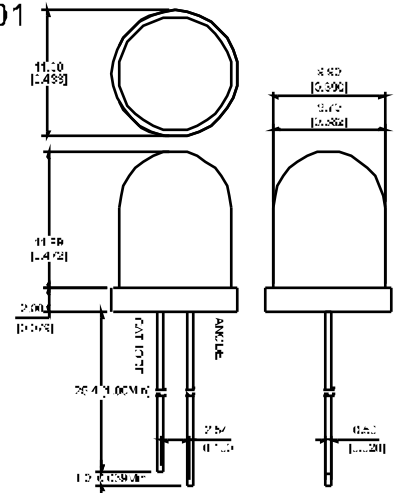
BL-L813



10mm Round LED Lamps.

Part No	Emit Color	λ P (nm)	Water / Clear	800	1500	25
BL-L101UEC	Ultra Orange	630			600	
BL-L101UYC	Ultra Yellow	590		200	700	
BL-L101PGC	Ultra Pure Green	525	Water	1000	5000	
BL-L101BGC	Ultra Blu sh Green	505	Clear	800	4000	
BL-L101UBC	Ultra Blue	470		800	2000	
BL-L101UWC	Ultra White	/		1000	5000	

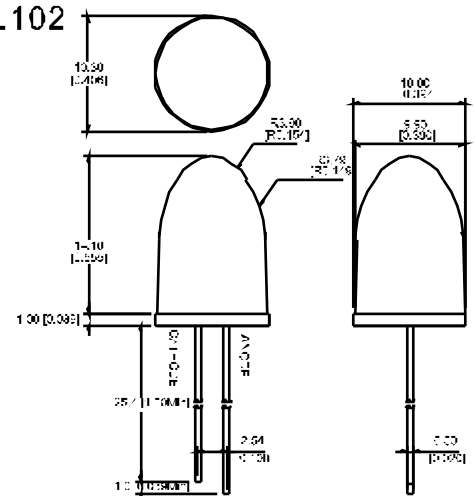
BL-L101



10mm Round-Helmet LED Lamps.

Part No	Emit Color	λ P (nm)	Water / Clear	800	1800	15
BL-L102UEC	Ultra Orange	630			600	
BL-L102UYC	Ultra Yellow	590		300	800	
BL-L102PGC	Ultra Pure Green	525	Water	1500	6000	
BL-L102BGC	Ultra Blu sh Green	505	Clear	1000	5000	
BL-L102UBC	Ultra Blue	470		1000	3000	
BL-L102UWC	Ultra White	/		5000	10000	

BL-L102



All dimensions are in millimeters (inches)
Tolerance is ±0.25(0.01") unless otherwise noted.
Specifications are subject to change without notice.

LED Component

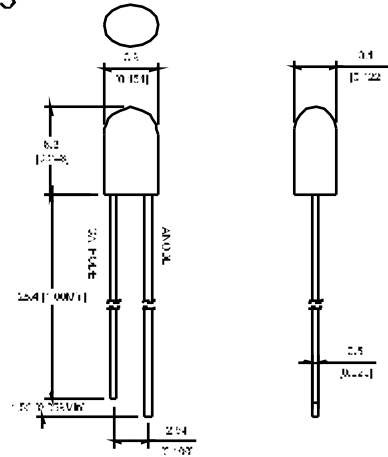
OVELED LAMP

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

4mm Ovel Type (3.9*3.1*6.3mm) LED Lamps.

Part No	Emit Color	λ P (nm)	Lens Type	Iv (mcd)	Iv (mcd)	Viewing Angle
				Min	Typ.	
RI-L453UFC	Ultra Orange	630	Water Clear	300	800	70/30
BL-L453UYC	Ultra Yellow	590		300	800	
BL-L453UGC	Ultra Green	574		100	250	
BL-L453PGC	Ultra Pure Green	525		800	1800	
BL-L453BGC	Ultra Bluish Green	505		800	1500	
RI-L453URC	Ultra Blue	470		800	1500	
BL-L453UWC	Ultra White	/		1000	2300	

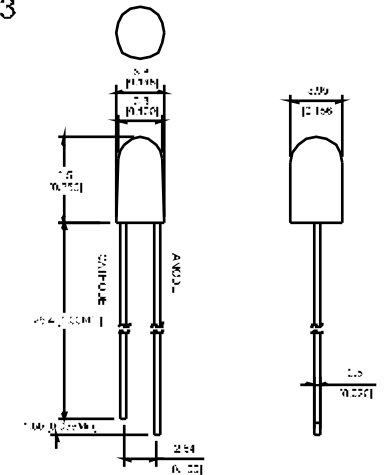
BL-L453



4mm Ovel Type (3.7*3.95*6.5mm) LED Lamps

Part No	Emit Color	λ P (nm)	Lens Type	Iv (mcd)	Iv (mcd)	Viewing Angle
				Min	Typ.	
BL-L463UEC	Ultra Orange	630	Water Clear	300	800	46/65
BL-L463UYC	Ultra Yellow	590		300	800	
BL-L463UGC	Ultra Green	574		100	250	
RI-L463PGC	Ultra Pure Green	525		800	1800	
BL-L463BGC	Ultra Bluish Green	505		800	1500	
BL-L463UBC	Ultra Blue	470		800	1500	
BL-L463UWC	Ultra White	/		1000	2300	

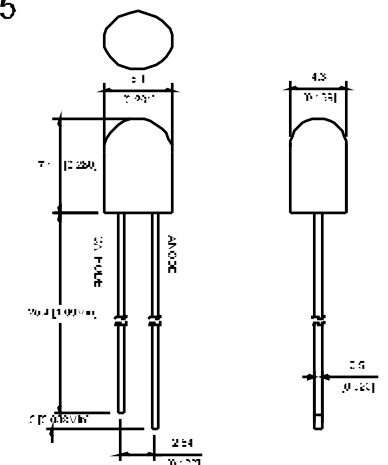
BL-L463



5mm Ovel Type (5.1*4.3*7.1mm) LED Lamps.

Part No	Emit Color	λ P (nm)	Lens Type	Iv (mcd)	Iv (mcd)	Viewing Angle
				Min	Typ.	
RI-L555UFC	Ultra Orange	630	Water Clear	300	850	65/35
BL-L555UYC	Ultra Yellow	590		300	850	
RI-L555UGC	Ultra Green	574		100	280	
BL-L555PGC	Ultra Pure Green	525		900	2000	
BL-L555BGC	Ultra Bluish Green	505		850	1700	
BL-L555UBC	Ultra Blue	470		800	1800	
BL-L555UWC	Ultra White	/		1200	2500	

BL-L555



All dimensions are in millimeters (inches)
Tolerance is ±0.25(0.01") unless otherwise noted.
Specifications are subject to change without notice.

LED Component

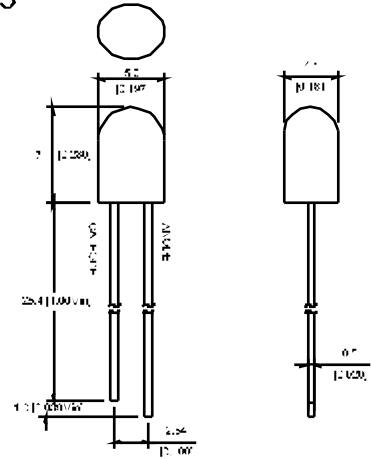
OVEL LED LAMP

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

5mm Ovel Type (5.0*4.1*7.1mm) LED Lamps

Part No	Emit Color	λ P (nm)	Lens Type	Min	Typ.	Viewing Angle
RI-L563UFC	Ultra Orange	630		Water / Clear	300	
BL-L563UYC	Ultra Yellow	590	300		850	
BL-L563UGC	Ultra Green	574	100		280	
BL-L563PGC	Ultra Pure Green	525	900		2000	
BL-L563BGC	Ultra Bluish Green	505	650		1700	
RI-L563URC	Ultra Blue	470	800		1800	
BL-L563UWC	Ultra White	/	1200		2500	

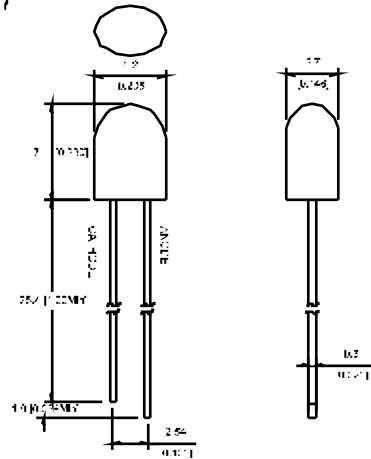
BL-L563



5mm Ovel Type (5.2*3.7*7.1mm) LED Lamps.

Part No	Emit Color	λ P (nm)	Lens Type	Min	Typ.	Viewing Angle
BL-L557UEC	Ultra Orange	630		Water / Clear	250	
BL-L557UYC	Ultra Yellow	590	250		800	
BL-L557UGC	Ultra Green	574	100		250	
BL-L557PGC	Ultra Pure Green	525	600		1800	
BL-L557BGC	Ultra Bluish Green	505	550		1500	
BL-L557UBC	Ultra Blue	470	600		1500	
BL-L557UWC	Ultra White	/	1000		2300	

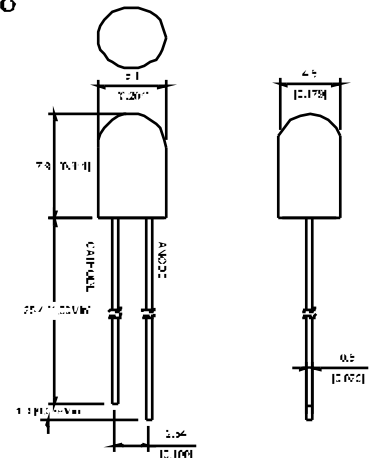
BL-L557



5mm Ovel Type (4.6*5.8*7.9mm) LED Lamps.

Part No	Emit Color	λ P (nm)	Lens Type	Min	Typ.	Viewing Angle
BL-L558UEC	Ultra Orange	630		Water / Clear	300	
BL-L558UYC	Ultra Yellow	590	300		850	
RI-L558UGC	Ultra Green	574	100		280	
BL-L558PGC	Ultra Pure Green	525	900		2000	
BL-L558BGC	Ultra Bluish Green	505	650		1700	
BL-L558UBC	Ultra Blue	470	800		1800	
BL-L558UWC	Ultra White	/	1200		2500	

BL-L558



LED Component

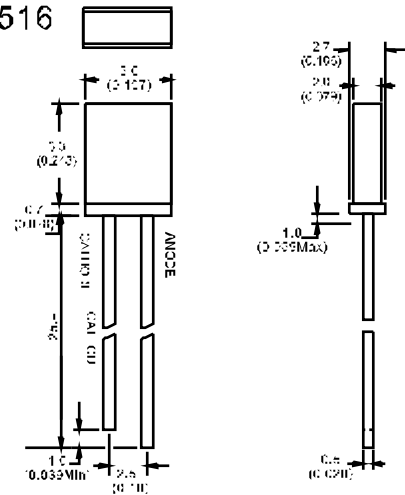
RECTANGULAR LED LAMP

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

2.0*5.0mm Rectangular Type LED Lamps.

Part No	Emit Color	λ P (nm)	Water / Clear	120	500	120
BL-L2516UFC	Ultra Orange	630		Water	120	
BL-L2516UYC	Ultra Yellow	590	150		700	
BL-L2516UGC	Ultra Green	574	Clear	50	500	
BL-L2516PGC	Ultra Pure Green	525		400	1000	
BL-L2516BGC	Ultra Blu sh Green	505	400	900		
BL-L2516URC	Ultra Blue	470	400	1200		
BL-L2516UWC	Ultra White	/	180	2000		

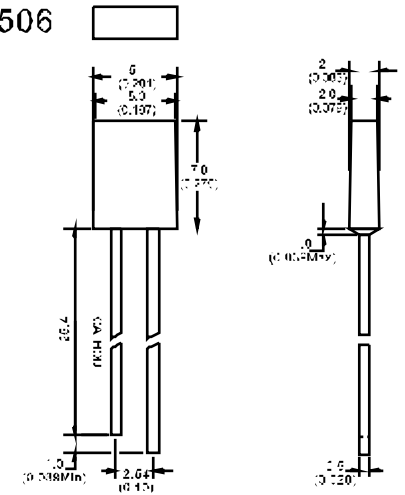
BL-L2516



2.0*5.0mm Rectangular Type LED Lamps.

Part No	Emit Color	λ P (nm)	Water / Clear	120	500	120
BL-L2506UEC	Ultra Orange	630		Water	120	
BL-L2506UYC	Ultra Yellow	590	150		700	
BL-L2506UGC	Ultra Green	574	Clear	50	500	
BL-L2506PGC	Ultra Pure Green	525		400	1000	
BL-L2506BGC	Ultra Blu sh Green	505	400	900		
BL-L2506UBC	Ultra Blue	470	400	1200		
BL-L2506UWC	Ultra White	/	180	2000		

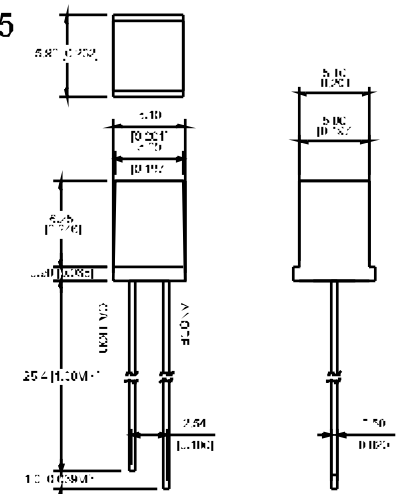
BL-L2506



5.0mm Square Type LED Lamps.

Part No	Emit Color	λ P (nm)	Water / Clear	120	500	110
BL-L55UEC	Ultra Orange	630		Water	120	
BL-L55LYC	Ultra Yellow	590	150		700	
BL-L55UGC	Ultra Green	574	Clear	50	500	
BL-L55PGC	Ultra Pure Green	525		400	1000	
BL-L55BGC	Ultra Blu sh Green	505	400	900		
BL-L55UBC	Ultra Blue	470	400	1200		
BL-L55LWC	Ultra White	/	180	2000		

BL-L55



All dimensions are in millimeters (inches)
Tolerance is ±0.25(0.01") unless otherwise noted.
Specifications are subject to change without notice.

LED Component

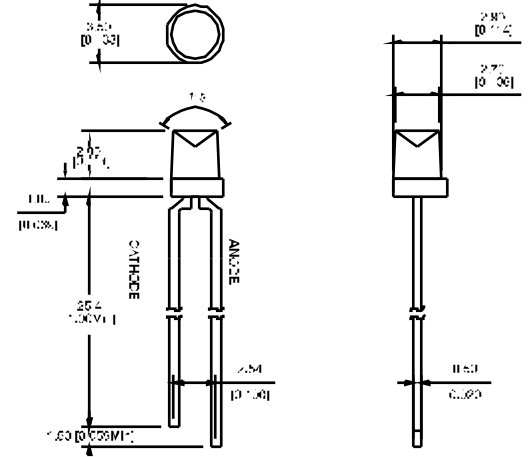
FLAT TOP & CYLINDRICAL LED LAMP

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

3.0mm Cylindrical, Inverted Cone LED lamp.

Part No	Emit Color	λ P (nm)	Water / Clear	Iv (mcd) Min	Iv (mcd) Typ.	Viewing Angle
RI-L334UFC	Ultra Orange	630			150	
BL-L334UYC	Ultra Yellow	590		150	400	
BL-L334UGC	Ultra Green	574		30	100	
BL-L334PGC	Ultra Pure Green	525	Water	300	1000	
BL-L334BGC	Ultra Blu sh Green	505	Clear	220	800	
RI-L334URC	Ultra Blue	470		500	1000	
BL-L334UWC	Ultra White	/		250	1200	

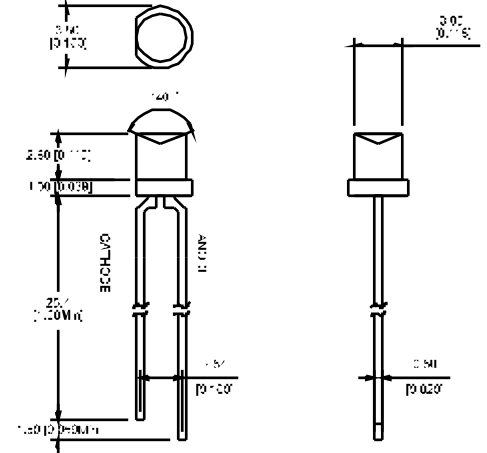
BL-L334



3.0mm Cylindrical, Inverted Cone LED lamp

Part No	Emit Color	λ P (nm)	Water / Clear	Iv (mcd) Min	Iv (mcd) Typ.	Viewing Angle
BL-L333UEC	Ultra Orange	630			150	
BL-L333UYC	Ultra Yellow	590		150	400	
BL-L333UGC	Ultra Green	574		30	100	
BL-L333PGC	Ultra Pure Green	525	Water	300	1000	
BL-L333BGC	Ultra Blu sh Green	505	Clear	220	800	
BL-L333UBC	Ultra Blue	470		500	1000	
BL-L333UWC	Ultra White	/		250	1200	

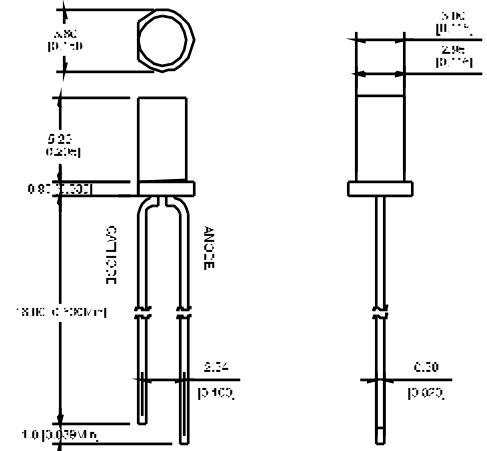
BL-L333



3.0mm Cylindrical LED lamp

Part No	Emit Color	λ P (nm)	Water / Clear	Iv (mcd) Min	Iv (mcd) Typ.	Viewing Angle
BL-L342UEC	Ultra Orange	630			160	
BL-L342UYC	Ultra Yellow	590		160	450	
RI-L342UGC	Ultra Green	574		35	100	
BL-L342PGC	Ultra Pure Green	525	Water	320	1000	
BL-L342BGC	Ultra Blu sh Green	505	Clear	250	900	
BL-L342UBC	Ultra Blue	470		500	1000	
BL-L342UWC	Ultra White	/		300	1500	

BL-L342



All dimensions are in millimeters (inches)
Tolerance is ±0.25(0.01") unless otherwise noted.
Specifications are subject to change without notice.

LED Component

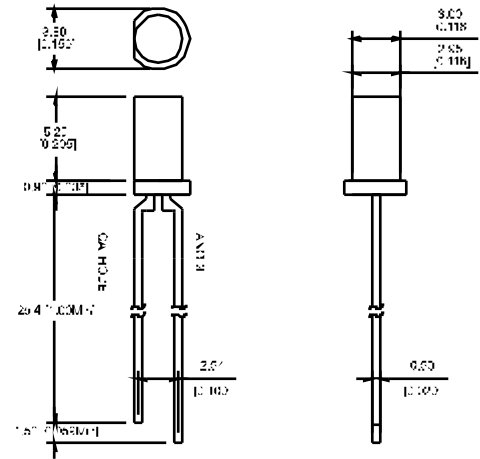
FLAT TOP & CYLINDRICAL LED LAMP

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

3.0mm Cylindrical LED lamp

Part No	Emit Color	λ P (nm)	Water / Clear	Typ. Min	Typ. Max	110
BL-L342UEC	Ultra Orange	630		Water	160	
BL-L342UYC	Ultra Yellow	590	Clear		160	450
BL-L342UGC	Ultra Green	574		Water	35	110
BL-L342PGC	Ultra Pure Green	525	Clear		320	1100
BL-L342BGC	Ultra Bluish Green	505		Water	250	900
BL-L342URC	Ultra Blue	470	Clear		550	1100
BL-L342UWC	Ultra White	/			300	1500

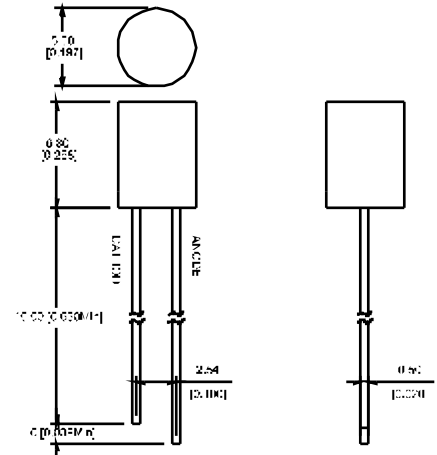
BL-L344



5mm Cylindrical LED lamp, FLAT TOP

Part No	Emit Color	λ P (nm)	Water / Clear	Typ. Min	Typ. Max	90
BL-L542UEC	Ultra Orange	630		Water	260	
BL-L542UYC	Ultra Yellow	590	Clear		260	600
BL-L542UGC	Ultra Green	574		Water	120	250
BL-L542PGC	Ultra Pure Green	525	Clear		800	2000
BL-L542BGC	Ultra Bluish Green	505		Water	700	1800
BL-L542UBC	Ultra Blue	470	Clear		650	1800
BL-L542UWC	Ultra White	/			1000	2500

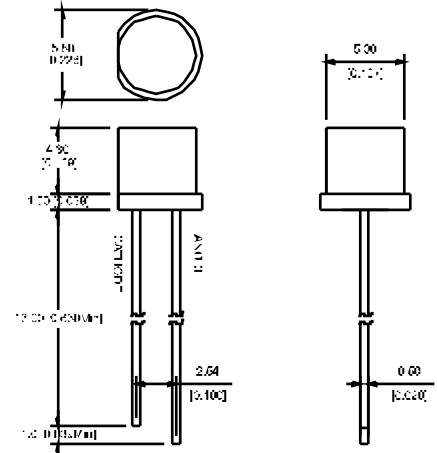
BL-L542



5mm Cylindrical LED lamp

Part No	Emit Color	λ P (nm)	Water / Clear	Typ. Min	Typ. Max	80
BL-L543UEC	Ultra Orange	630		Water	260	
BL-L543UYC	Ultra Yellow	590	Clear		260	500
BL-L543UGC	Ultra Green	574		Water	120	250
BL-L543PGC	Ultra Pure Green	525	Clear		800	2000
BL-L543BGC	Ultra Bluish Green	505		Water	700	1800
BL-L543UBC	Ultra Blue	470	Clear		650	1800
BL-L543UWC	Ultra White	/			1000	2500

BL-L543



All dimensions are in millimeters (inches)
Tolerance is ±0.25(0.01") unless otherwise noted.
Specifications are subject to change without notice.

LED Component

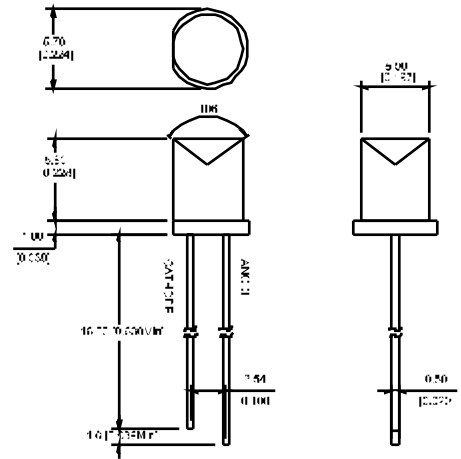
FLAT TOP & CYLINDRICAL LED LAMP

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

5mm Cylindrical LED lamp

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle
Min	Typ.					
RL-L532UFC	Ultra Orange	650	Water Clear	100	350	110
BL-L532UYC	Ultra Yellow	590		100	350	
BL-L532UGC	Ultra Green	574		40	80	
BL-L532PGC	Ultra Pure Green	525		400	1000	
BL-L532BGC	Ultra Bluish Green	505		250	800	
RL-L532URC	Ultra Blue	470		550	1000	
BL-L532UWC	Ultra White	-		250	1000	

BL-L532



LED Component

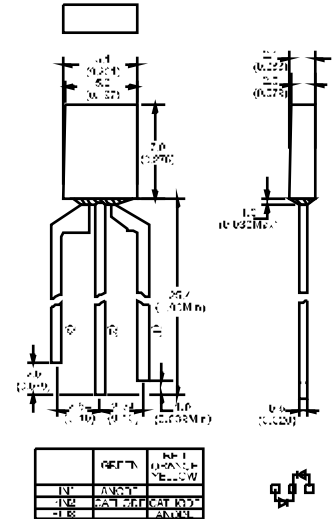
Bi-color & Bi-polar LED lamp

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

2.0*5.0mm Rectangular Type BI-COLOR LED Lamps, with 3 leads.

Part No	Emit Color	λ P (nm)	Water	Diff.	Iv (mcd)	Viewing Angle
BL-L2519EGW	Orange	635	Water	Diff.	7	80
	Green	570			4	50
BL-L2519YCW	Yellow	585			4	120
	Green	570			4	80
BL-L2519JFCJGW	Ultra Orange	630	60	180		
	Ultra Green	574	60	80		

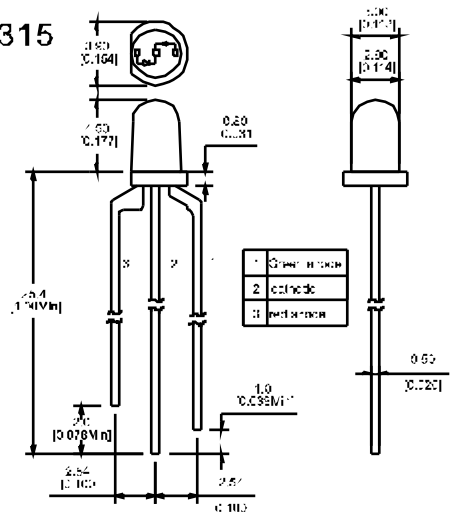
BL-L2519



3.0mm Round Type BI-COLOR LED Lamps, with 3 leads

Part No	Emit Color	λ P (nm)	Water	Diff.	Iv (mcd)	Viewing Angle
BL-L315EGW	Orange	635	Water	Diff.	5	15
	Green	570			3	10
BL-L315YCW	Yellow	585			3	10
	Green	570			3	10
BL-L315UEUGW	Ultra Orange	630	90	180		
	Ultra Green	574	70	120		

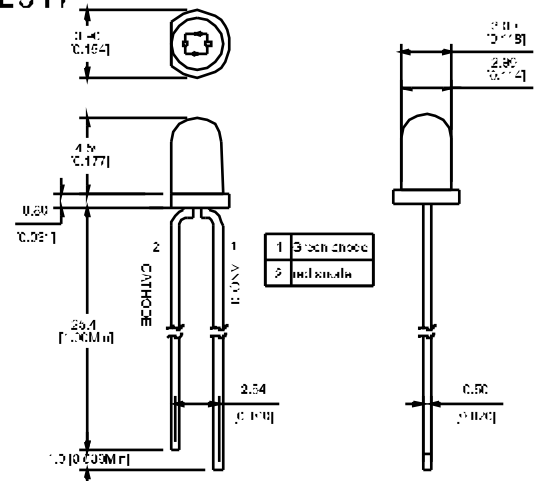
BL-L315



3.0mm Round Type BI-COLOR LED Lamps, with 2 leads

Part No	Emit Color	λ P (nm)	Water	Diff.	Iv (mcd)	Viewing Angle
BL-L317EGW	Orange	635	Water	Diff.	5	15
	Green	570			3	10
BL-L317YCW	Yellow	585			3	10
	Green	570			3	10
BL-L317UEUGW	Ultra Orange	630	90	180		
	Ultra Green	574	70	120		

BL-L317



All dimensions are in millimeters (inches)
Tolerance is ±0.25(0.01") unless otherwise noted.
Specifications are subject to change without notice.

LED Component

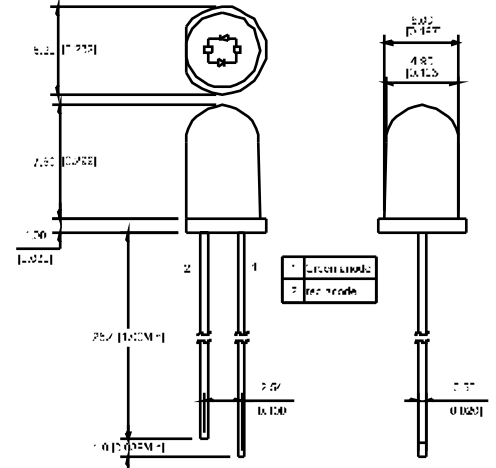
Bi-color & Bi-polar LED lamp

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 2θ1/2	Drawing
				Min	Typ.		

5.0mm Round Type BI-COLOR LED Lamps, with 2 lead

BL-L517ECW	Orange	635	Water Diff.	5	20	60
	Green	570		5	15	
BL-L517YCW	Yellow	585		5	15	
	Green	570		5	15	
BL-L517UEUGW	Ultra Orange	630		100	180	
	Ultra Green	574		80	130	

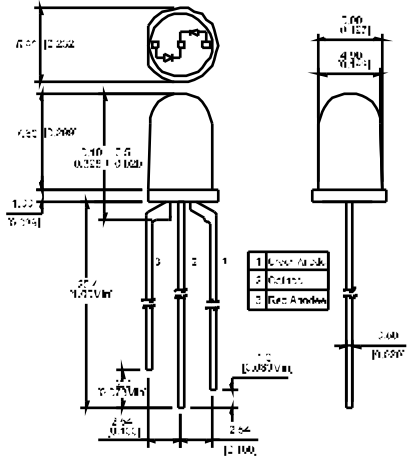
BL-L517



5.0mm Round Type BI-COLOR LED Lamps, with 3 lead

BL-L519ECW	Orange	635	Water Diff.	5	20	60
	Green	570		5	15	
BL-L519YCW	Yellow	585		5	15	
	Green	570		5	15	
BL-L519UEUGW	Ultra Orange	630		100	180	
	Ultra Green	574		80	130	

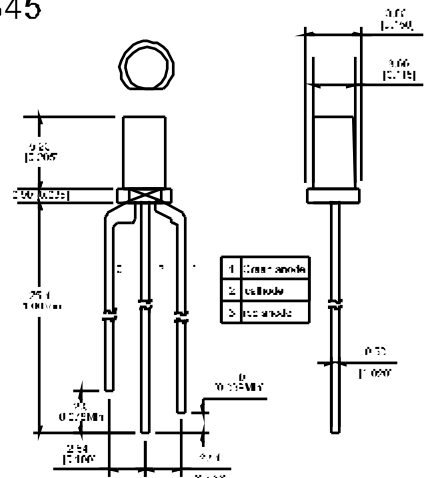
BL-L519



3.0mm Elliptical Type BI-COLOR LED Lamps, with 3 leads

BL-L345EGW	Orange	635	Water Diff.	5	15	100
	Green	570		3	10	
BL-L345YCW	Yellow	585		3	10	
	Green	570		3	10	
BL-L345UEUGW	Ultra Orange	630		90	180	
	Ultra Green	574		70	120	

BL-L345



All dimensions are in millimeters (inches)
Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
Specifications are subject to change without notice.

LED Component

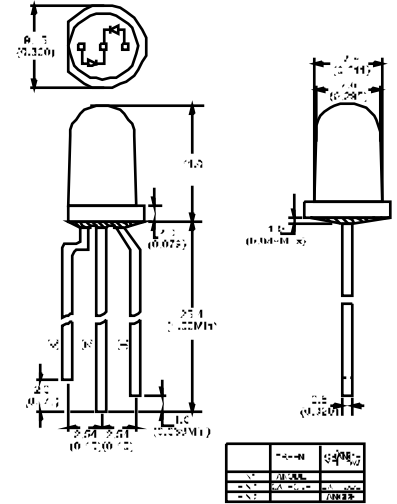
Bi-color & Bi-polar LED lamp

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

8mm Round Type BI-COLOR LED Lamps, with 3 lead

BL-L809ECW	Orange	635	Water Tuff	5	20	60
	Green	570		5	15	
BL-L809YGW	Yellow	585		5	15	
	Green	570		5	15	
BL-L809UEUGW	Ultra Orange	630		100	190	
	Ultra Green	574		50	130	

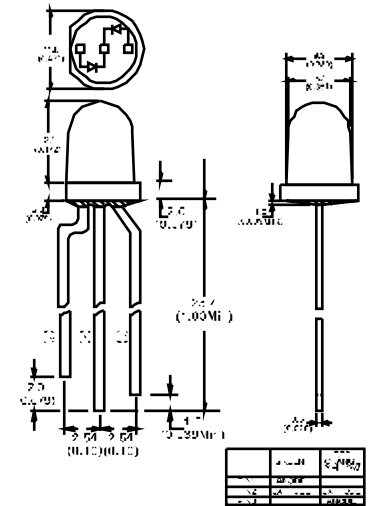
BL-L809



10mm Round Type BI-COLOR LED Lamps, with 3 lead

BL-L109EGW	Orange	635	Water Tuff	5	20	60
	Green	570		5	15	
BL-L109YGW	Yellow	585		5	15	
	Green	570		5	15	
BL-L109UEUGW	Ultra Orange	630		100	190	
	Ultra Green	574		50	130	

BL-L109



LED Component

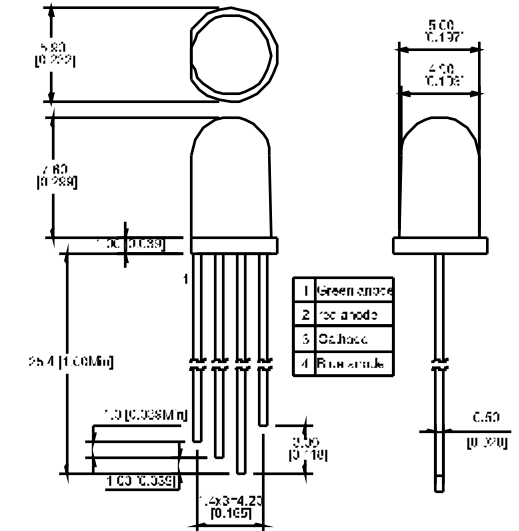
Bi-color & Bi-polar LED lamp

Part No	Emit Color	λ P (nm)	Lens Type	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

5.0mm Round Type, RGB Full Color LED Lamps

BL-L5-5RG3C-CA	Ultra Orange	630	Water Clear	800	2000	20
	Ultra Pure Green	525		2000	5000	
	Blue	430		800	2000	
BL-L515RCBW-CA	Ultra Orange	630	Water Diff.	200	500	30
	Ultra Pure Green	525		300	600	
	Blue	430		150	300	
BL-L5-5RG3C-CC	Ultra Orange	630	Water Clear	800	2000	20
	Ultra Pure Green	525		2000	5000	
	Blue	430		800	2000	
BL-L515RCBW-CC	Ultra Orange	630	Water Diff.	200	500	30
	Ultra Pure Green	525		300	600	
	Blue	430		150	300	

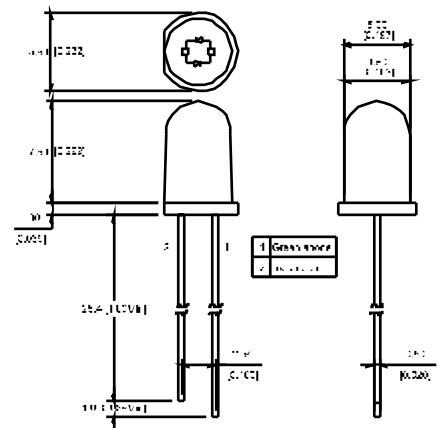
BL-L515



5.0mm Round Type Bi-polar LED Lamps, with 2 lead

BL-L517EEW	Orange	635	Water	8	20	60
	Orange	635		8	20	
BL-L517GGW	Green	570	Diff.	5	15	60
	Green	570		5	15	
BL-L517YYW	Yellow	585	Water	5	15	60
	Yellow	585		5	15	
BL-L517UEC	Ultra Orange	630	Water Clear	800	2000	20
BL-L517UYC	Ultra Yellow	590		1000	2200	
BL-L517UYCC	Ultra Yellow	619		1000	2200	
BL-L517UGC	Ultra Green	574		300	700	
BL-L517PGC	Ultra Pure Green	525		2000	6000	
BL-L517BGC	Ultra Blu sh Green	505		1800	4000	
BL-L517UBC	Ultra Blue	470		2000	5000	
BL-L517UVC	UV	405		80	150	

BL-L517



LED Component



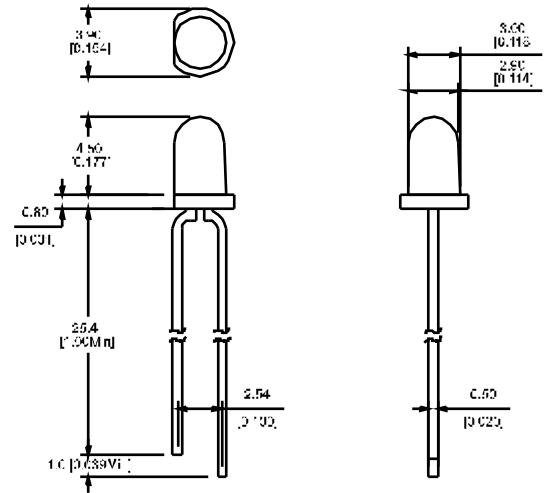
BLINKING LED LAMP

Part No	λ_p (nm)	Pulse Rate(Hz) VDD=5V (Hz)	Lens	Iv(mcd)		Viewing Angle 201/2	Drawing
				Min	Typ.		

3mm Blinking LED

Part No	λ_p (nm)	Pulse Rate(Hz)	Lens	Iv(mcd) Min	Iv(mcd) Typ.	Viewing Angle
BL-L314SRC-B	660	2.4	Water Clear	50	220	30
BL-L314LRC-B	660	2.4		200	500	
BL-L314URC-B	660	2.4		500	900	
BL-L314UEC-B	660	2.4		900	1800	
BL-L314UYC-B	590	2.4		900	2000	
BL-L314UGC-B	574	2.4		220	600	
BL-L314PGC-B	525	2.4		1200	3000	
BL-L314RGC-B	505	2.4		900	2800	
BL-L314LBC-B	470	2.4		500	1700	
BL-L314VC-B	405	2.4		100	150	
BL-L314WGC-B		2.4		900	2000	

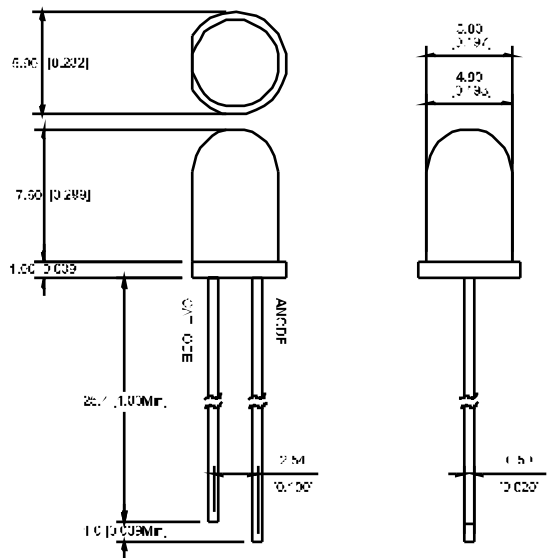
BL-L314XX-B



5mm Blinking LED

Part No	λ_p (nm)	Pulse Rate(Hz)	Lens	Iv(mcd) Min	Iv(mcd) Typ.	Viewing Angle
BL-L513SRC-B	660	2.4	Water Clear	50	250	20
BL-L513LRC-B	660	2.4		250	600	
BL-L513URC-B	660	2.4		600	1000	
BL-L513UEC-B	660	2.4		800	2000	
BL-L513UYC-B	590	2.4		1000	2200	
BL-L513UGC-B	574	2.4		300	700	
BL-L513PGC-B	525	2.4		2000	5000	
BL-L513BGC-B	505	2.4		1800	4000	
BL-L513URC-B	470	2.4		2000	5000	
BL-L513VC-B	405	2.4		80	150	
BL-L513WGC-B		2.4		3000	10000	

BL-L513XX-B



All dimensions are in millimeters (inches)
Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
Specifications are subject to change without notice.

LED Component



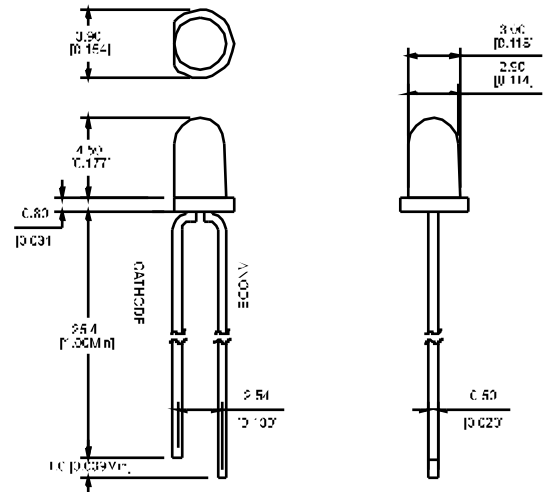
INFRARED EMITTING DIODES

Part No	Emit Color	λ_p (nm)	Lens Type	Radiant Power (mw/sr)	Viewing Angle 2 θ 1/2	Drawing
---------	------------	------------------	-----------	-----------------------	------------------------------	---------

3mm IR LED

3L-L314IRAC	GaAs	940	Water Clear	25	40
3L-L314IRAB	GaAs	940	Blue Trans	25	
3L-L314IRBC	GaAs	850	Water Clear	25	
3L-L314IRBB	GaAs	850	Blue Trans	25	
3L-L314IRCC	GaAs	850	Water Clear	25	
3L-L314IRCB	GaAs	850	Blue Trans	25	
3L-L314IRCY	GaAs	850	Yellow Trans	25	

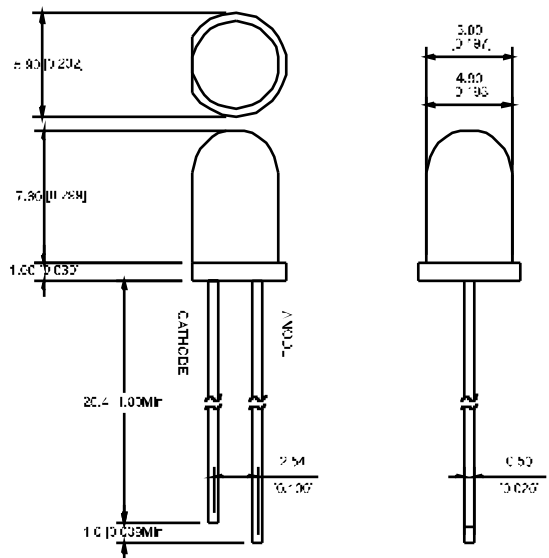
BL-L314IR



5mm IR LED

3L-L513IRAC	GaAs	940	Water Clear	30	30
3L-L513IRAB	GaAs	940	Blue Trans	30	
3L-L513IRBC	GaAs	850	Water Clear	30	
3L-L513IRBB	GaAs	850	Blue Trans	30	
3L-L513IRCC	GaAs	850	Water Clear	30	
3L-L513IRCB	GaAs	850	Blue Trans	30	
3L-L513IRCY	GaAs	850	Yellow Trans	30	

BL-L513IR



All dimensions are in millimeters (inches)
Tolerance is ± 0.25 (0.01") unless otherwise noted.
Specifications are subject to change without notice.

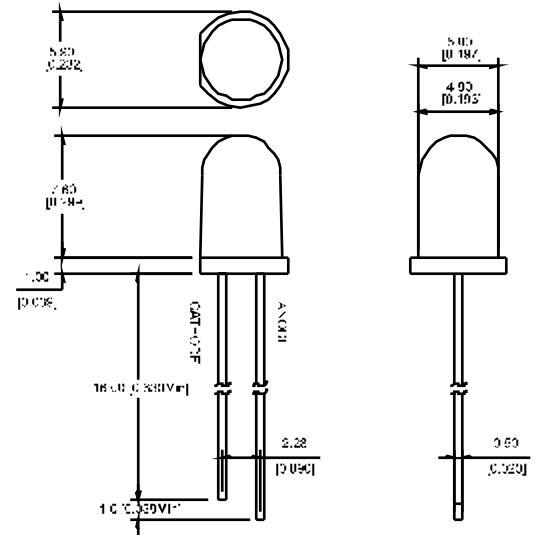
LED Component

SILICON PHOTO DIODES

5.1*3.0*7.4mm SILICON PHOTO DIODES

Items	Symbol	Min.	Typ.	Max.	Unit	Condition
Wavelength of Peak	λ_p	-	940	-	nm	-
Sensitivity						
Open Circuit Voltage	VOC	-	0.35	-	V	H=5mW/cm ²
Short Circuit Current	ISC	-	75	-	µA	1P=940nm
Reverse Light Current	IL	-	120	-	µA	H=5mW/cm ²
						1P=940nm
						VR=5V
Reverse Dark Current	ID	-	5	30	nA	H=0mW/cm ² VR=10V
Reverse Break down Voltage	VBR	35	170	-	V	H=0mW/cm ² IR=100µA
Viewing angle	2θ1/2	-	35	-	Deg	
Rise/Fall Time	Tr/Tf	-	50/50	-	NS	RL=100Ω
						VR=10V

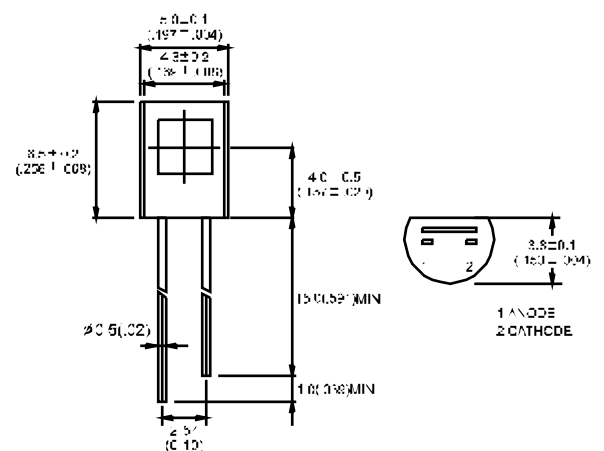
BL-L512PD



5*3.8*6.5mm SILICON PHOTO DIODES

Items	Symbol	Min.	Typ.	Max.	Unit	Condition
Wavelength of Peak	λ_p	-	940	-	nm	-
Sensitivity						
Open Circuit Voltage	Voc	-	0.35	-	V	H=5mW/cm ²
Short Circuit Current	Isc	50	75	-	µA	1P=940nm
Reverse Light Current	IL	60	120	-	µA	H=5mW/cm ²
						1P=940nm
						VR=5V
Reverse Dark Current	Id	-	5	30	nA	H=0mW/cm ² VR=10V
Reverse Break down Voltage	Vbr	35	170	-	V	H=0mW/cm ² IR=100µA
Viewing angle	2θ1/2	-	140	-	Deg	
Rise/Fall Time	Tr/Tf	-	50/50	-	NS	RI=100Ω
						VR=10V

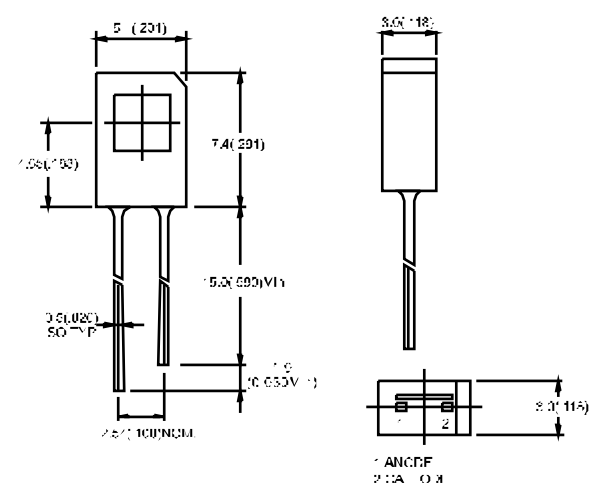
BL-L4802PD



5.1*3.0*7.4mm SILICON PHOTO DIODES

Items	Symbol	Min.	Typ.	Max.	Unit	Condition
Wavelength of Peak	λ_p	-	940	-	nm	-
Sensitivity						
Open Circuit Voltage	Voc	-	0.35	-	V	H=5mW/cm ²
Short Circuit Current	Isc	-	75	-	µA	1P=940nm
Reverse Light Current	IL	-	120	-	µA	H=5mW/cm ²
						1P=940nm
						VR=5V
Reverse Dark Current	Id	-	5	10	nA	H=0mW/cm ² VR=10V
Reverse Break down Voltage	Vbr	35	170	-	V	H=0mW/cm ² IR=100µA
Viewing angle	2θ1/2	-	140	-	Deg	
Rise/Fall Time	Tr/Tf	-	50/50	-	NS	RI=100Ω
						VR=10V

BL-L3522PD



All dimensions are in millimeters (inches)
Tolerance is ±0.25(0.01") unless otherwise noted.
Specifications are subject to change without notice.