

# INDEX

## Through-hole LED

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Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 2x3mm Rectangular Flangeless White LED Lamps

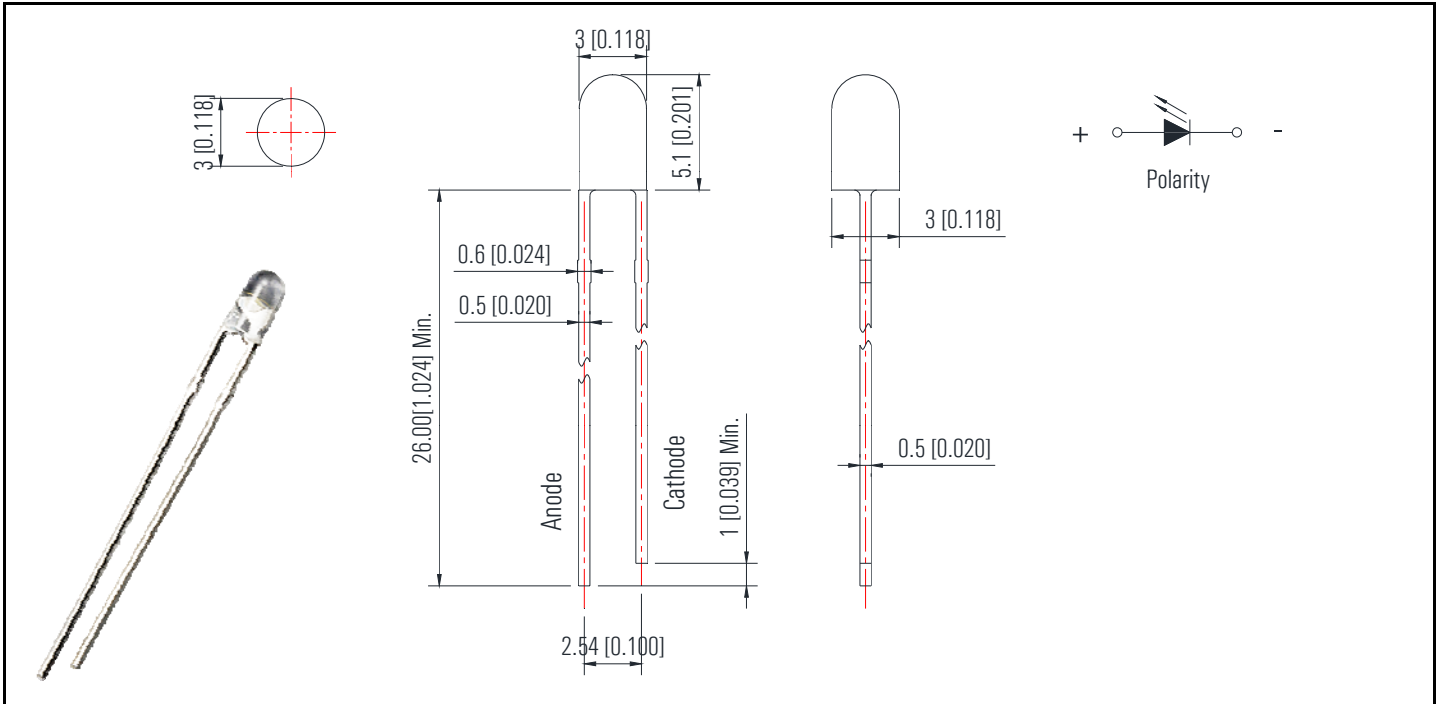
234WC2Q-W2-3P	InGaN	Cool White	x=0.28	y=0.28	Water Clear	3.00	3.40	20	780	1300	130
234WC2Q-W5-3P	InGaN	Neutral White	x=0.33	y=0.32		3.00	3.40		780	1300	
234WC2Q-W6-3P	InGaN	Warm White	x=0.43	y=0.40		3.00	3.40		780	1300	

### 3mm Cylindrical With Flange White LED Lamps

304WC1X-W2-3P	InGaN	Cool White	x=0.28	y=0.28	Water Clear	3.00	3.40	20	780	1300	100
304WC1X-W5-3P	InGaN	Neutral White	x=0.33	y=0.32		3.00	3.40		780	1300	
304WC1X-W6-3P	InGaN	Warm White	x=0.43	y=0.40		3.00	3.40		780	1300	

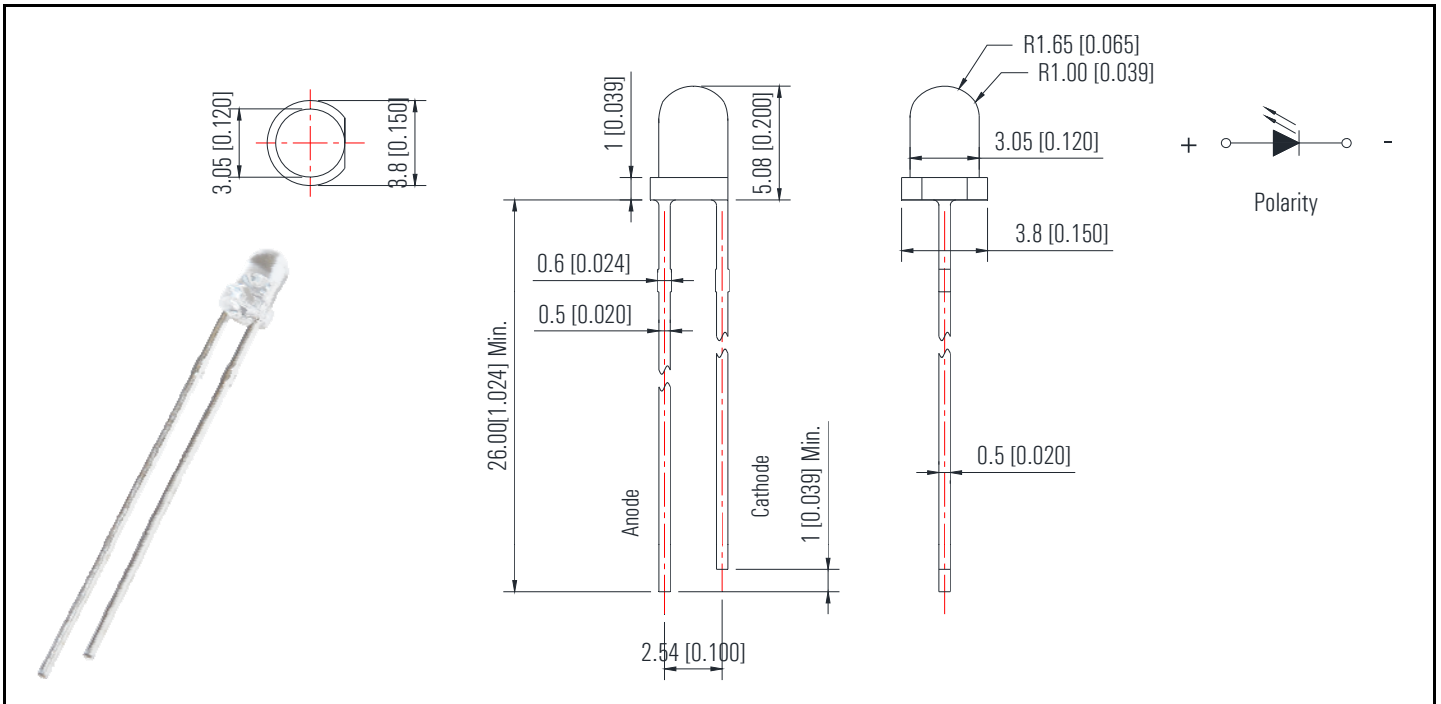
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 3mm Round Without Flange White LED Lamps



304WC2J-W2-3PD	InGaN	Cool White	x=0.28	y=0.28	Water Clear	3.00	3.40	20	5000	8500	30
304WC2J-W5-3PD	InGaN	Neutral White	x=0.33	y=0.32		3.00	3.40		5000	8500	
304WC2J-W6-3PD	InGaN	Warm White	x=0.43	y=0.40		3.00	3.40		5000	8500	

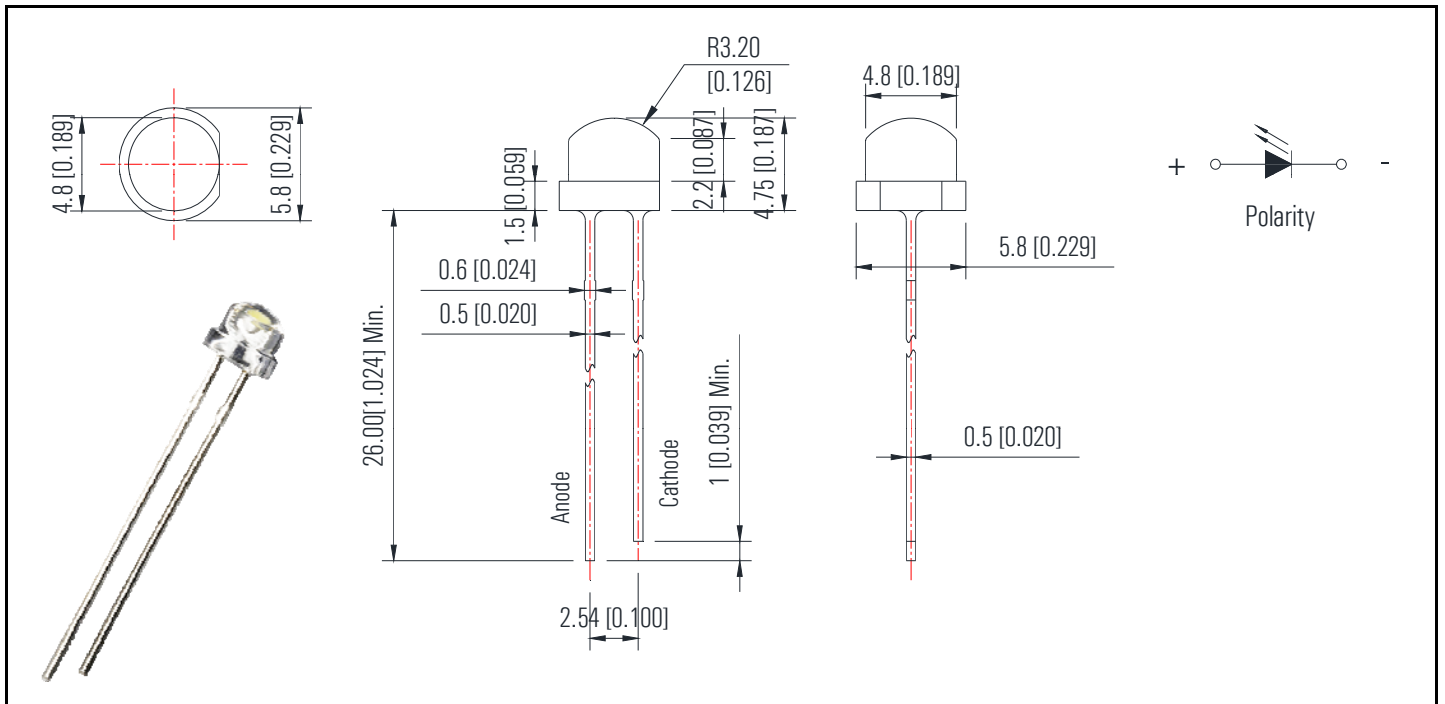
### 3mm Round Standard White LED Lamps



304WC4B-W2-3PD	InGaN	Cool White	x=0.28	y=0.28	Water Clear	3.00	3.40	20	5000	8500	30
304WC4B-W5-3PD	InGaN	Neutral White	x=0.33	y=0.32		3.00	3.40		5000	8500	
304WC4B-W6-3PD	InGaN	Warm White	x=0.43	y=0.40		3.00	3.40		5000	8500	

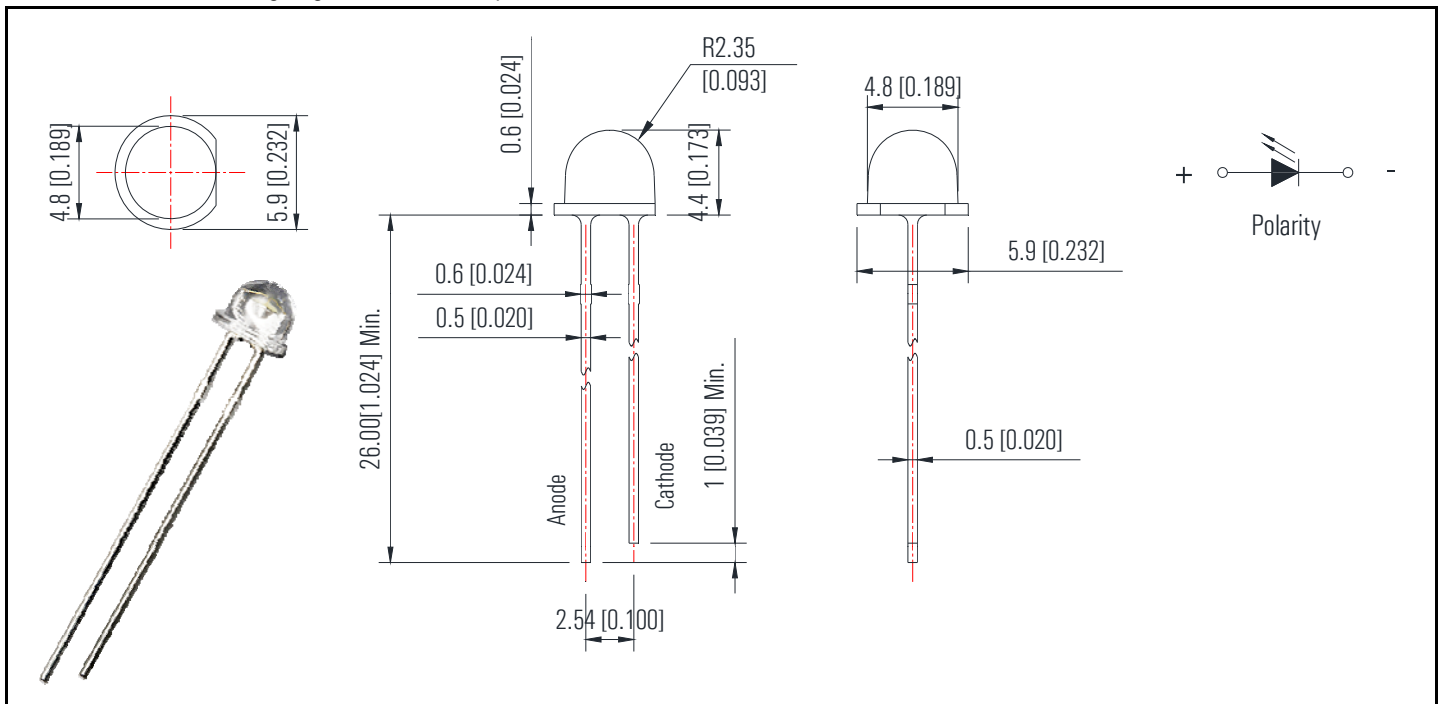
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ ½

### 4.8mm Round Wide Viewing Angle White LED Lamps



484WC1C-W2-3P	InGaN	Cool White	x=0.28	y=0.28	Water Clear	3.00	3.40	20	1300	2200	100
484WC1C-W5-3P	InGaN	Neutral White	x=0.33	y=0.32		3.00	3.40		1300	2200	
484WC1C-W6-3P	InGaN	Warm White	x=0.43	y=0.40		3.00	3.40		1300	2200	

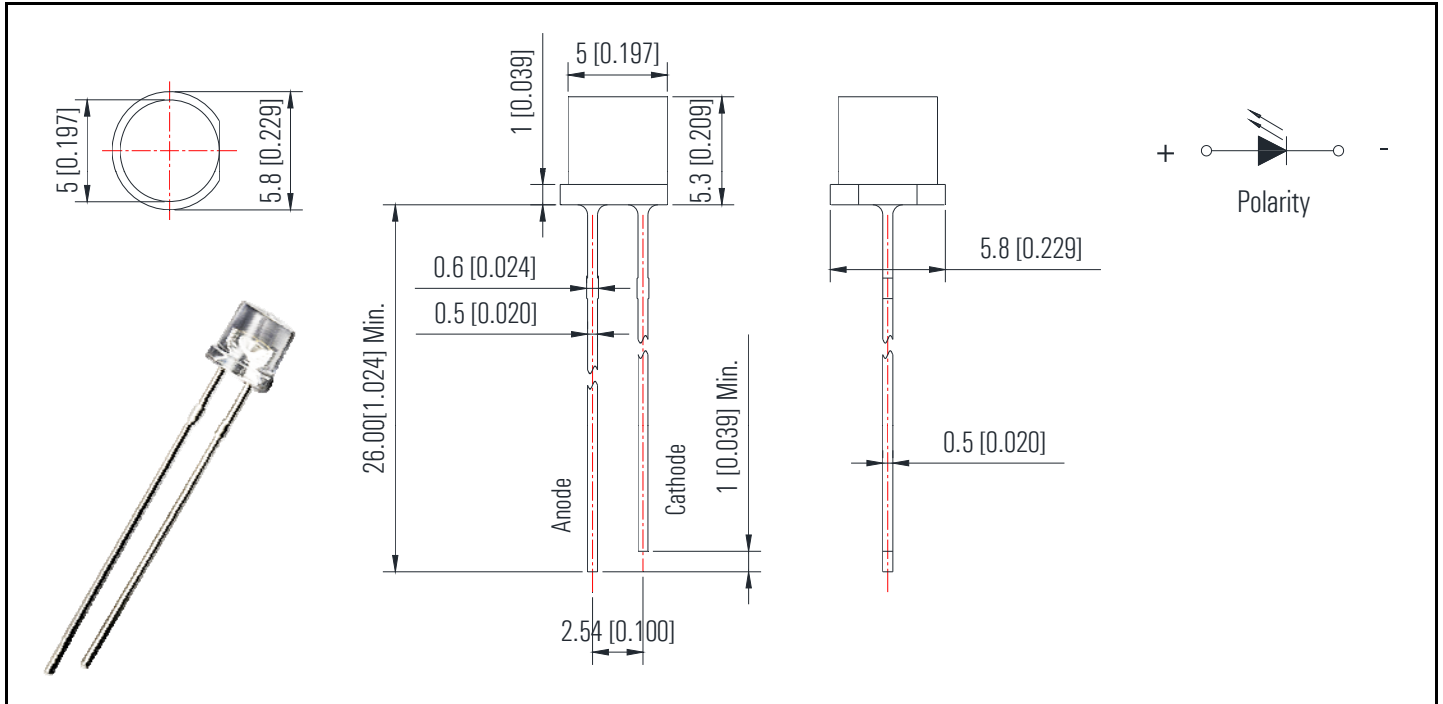
### 4.8mm Round Wide Viewing Angle White LED Lamps



484WC1F-W2-3P	InGaN	Cool White	x=0.28	y=0.28	Water Clear	3.00	3.40	20	1300	2200	90
484WC1F-W5-3P	InGaN	Neutral White	x=0.33	y=0.32		3.00	3.40		1300	2200	
484WC1F-W6-3P	InGaN	Warm White	x=0.43	y=0.40		3.00	3.40		1300	2200	

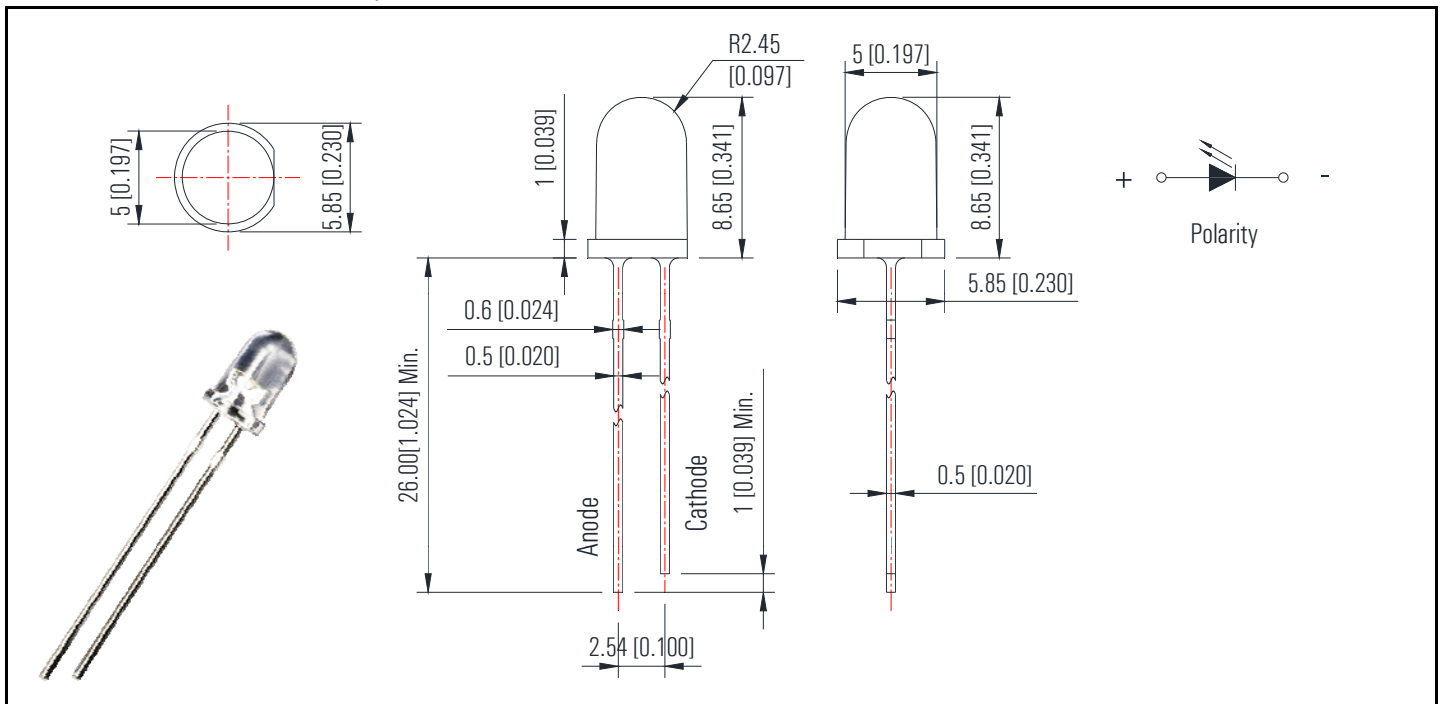
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 5mm Cylindrical With Flange White LED Lamps



504WC1E-W2-3P	InGaN	Cool White	x=0.28	y=0.28	Water Clear	3.00	3.40	20	1000	1700	100
504WC1E-W5-3P	InGaN	Neutral White	x=0.33	y=0.32		3.00	3.40		1000	1700	
504WC1E-W6-3P	InGaN	Warm White	x=0.43	y=0.40		3.00	3.40		1000	1700	

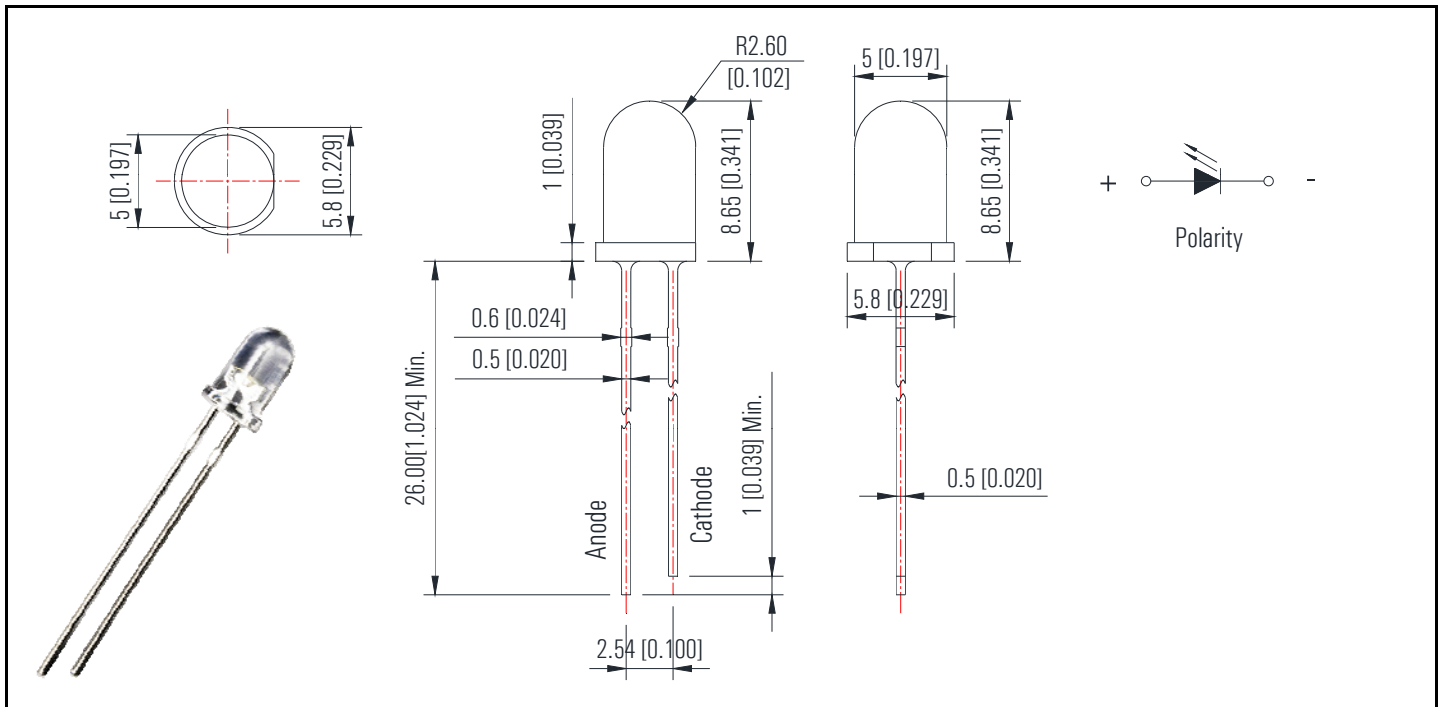
### 5mm Round Standard White LED Lamps



504WC2E-W2-3PC	InGaN	Cool White	x=0.28	y=0.28	Water Clear	3.00	3.40	20	14000	23000	15
504WC2E-W5-3PC	InGaN	Neutral White	x=0.33	y=0.32		3.00	3.40		14000	23000	
504WC2E-W6-3PC	InGaN	Warm White	x=0.43	y=0.40		3.00	3.40		14000	23000	

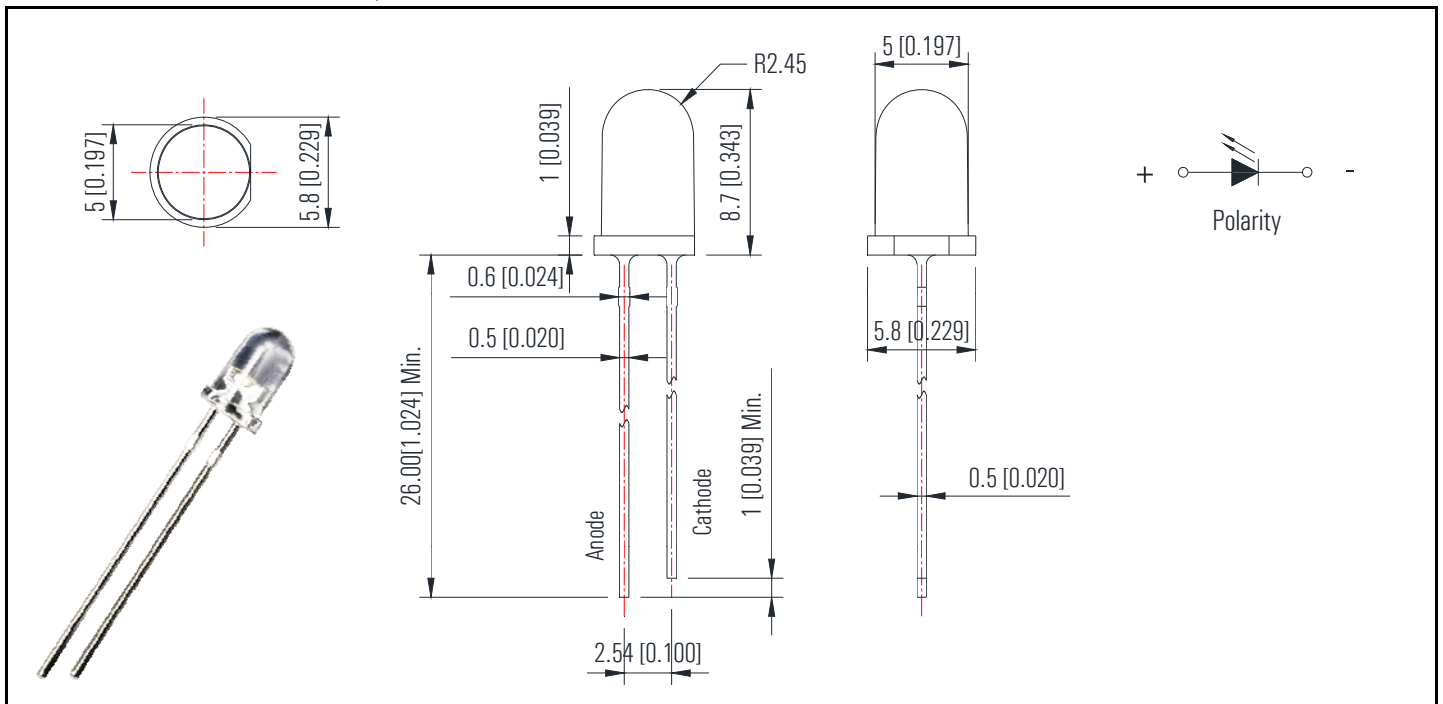
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ 1/2

5mm Round Standard White LED Lamps



504WC2V-W2-3PD	InGaN	Cool White	x=0.28	y=0.28	Water Clear	3.00	3.40	20	5000	8500	30
504WC2V-W5-3PD	InGaN	Neutral White	x=0.33	y=0.32		3.00	3.40		5000	8500	
504WC2V-W6-3PD	InGaN	Warm White	x=0.43	y=0.40		3.00	3.40		5000	8500	

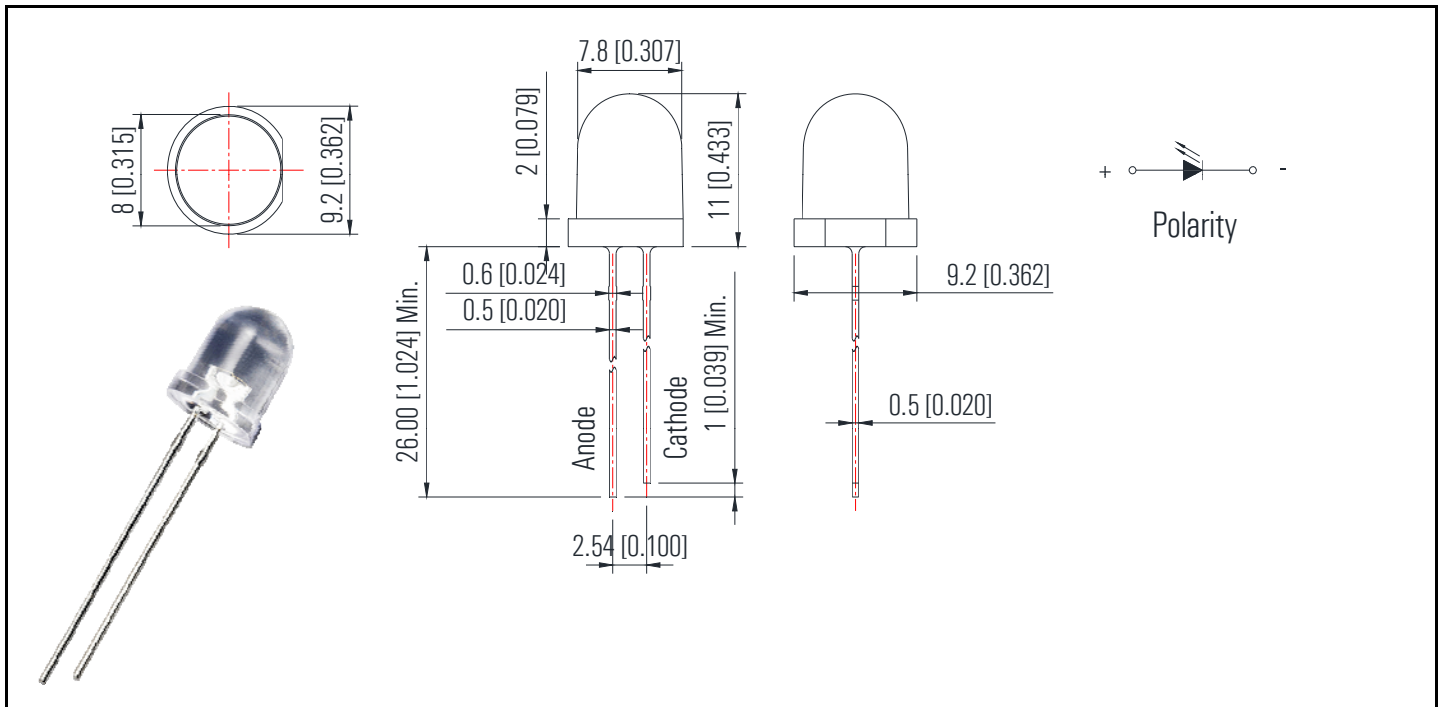
5mm Round Standard White LED Lamps



504WC2Z-W2-3PF	InGaN	Cool White	x=0.28	y=0.28	Water Clear	3.00	3.40	20	2900	5000	60
504WC2Z-W5-3PF	InGaN	Neutral White	x=0.33	y=0.32		3.00	3.40		2900	5000	
504WC2Z-W6-3PF	InGaN	Warm White	x=0.43	y=0.40		3.00	3.40		2900	5000	

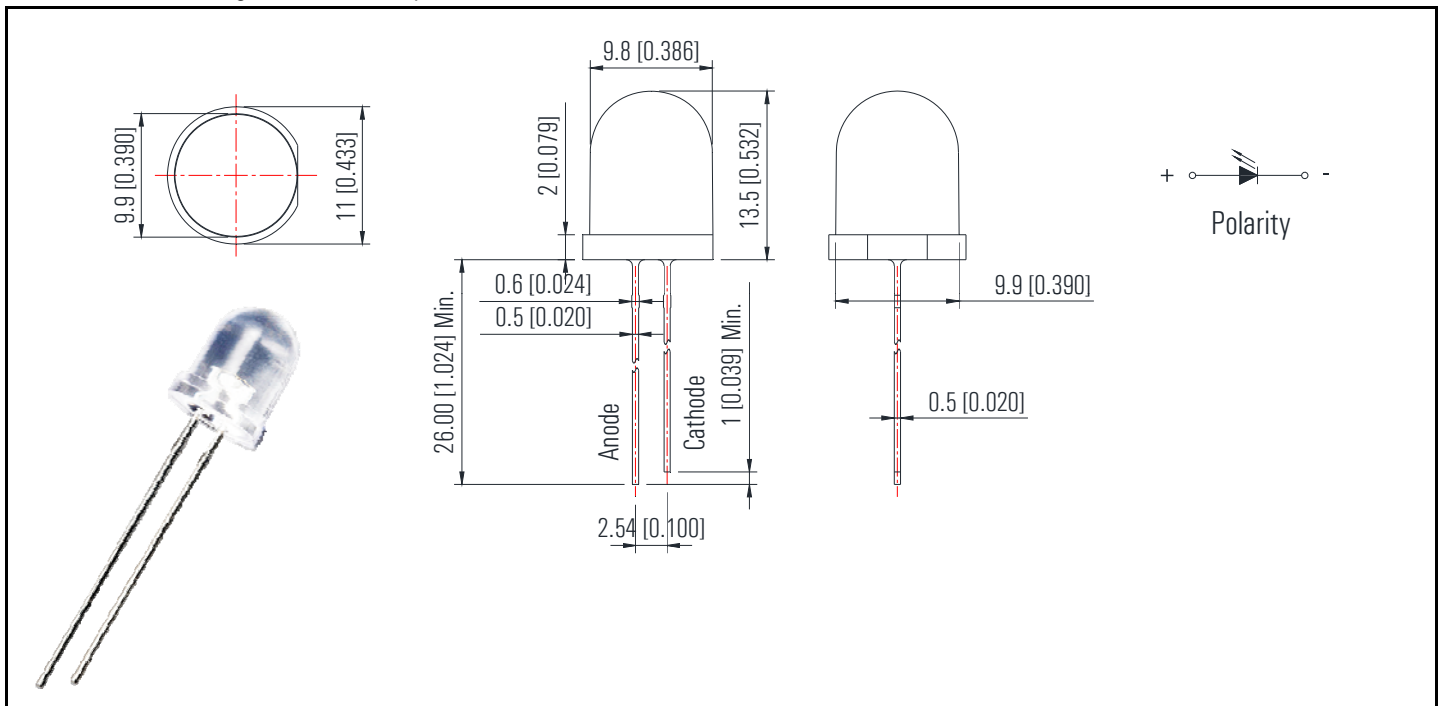
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

## 8mm Round With Flange White LED Lamps



804WC2C-W2-3PD	InGaN	Cool White	x=0.28	y=0.28	Water Clear	3.00	3.40	20	5000	8500	30
804WC2C-W5-3PD	InGaN	Neutral White	x=0.33	y=0.32		3.00	3.40		5000	8500	
804WC2C-W6-3PD	InGaN	Warm White	x=0.43	y=0.40		3.00	3.40		5000	8500	

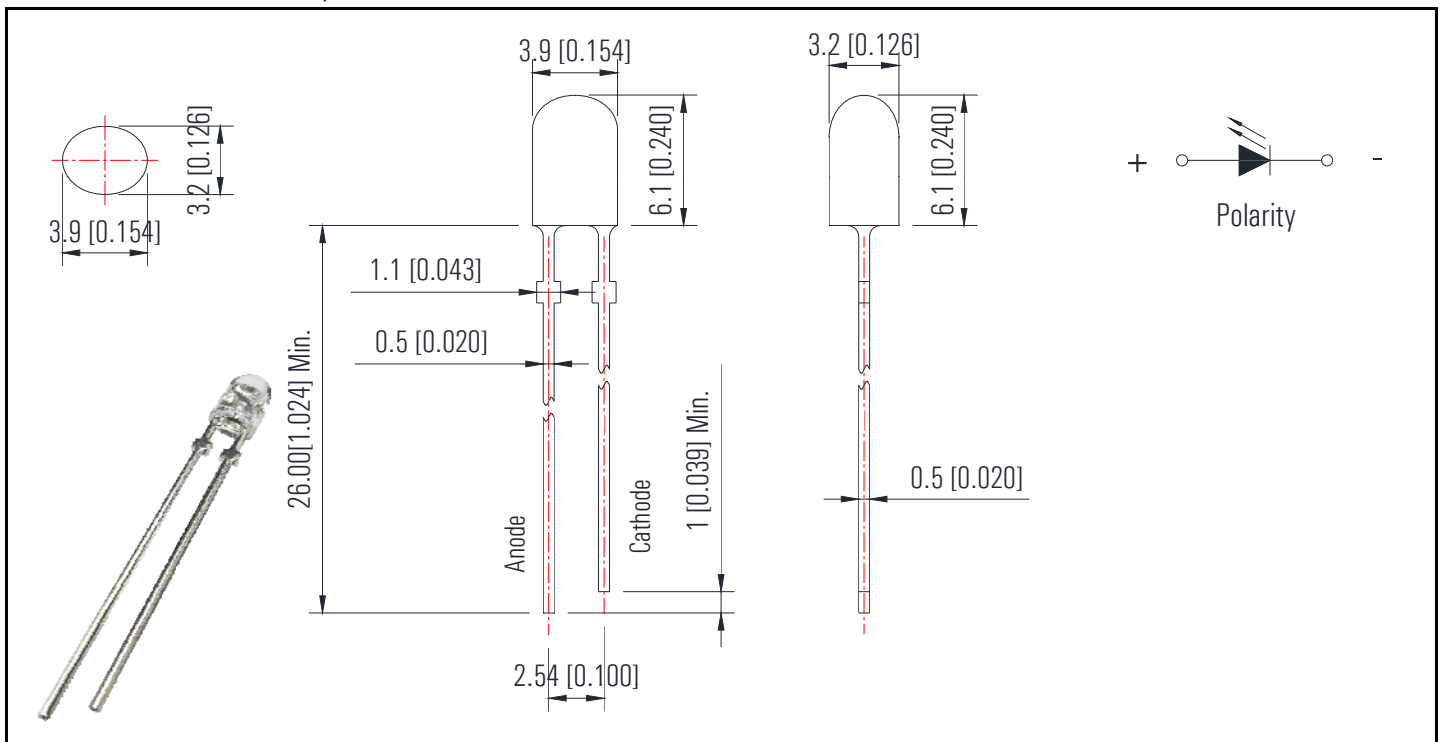
## 10mm Round With Flange White LED Lamps



1004WC2R-W2-3PC	InGaN	Cool White	x=0.28	y=0.28	Water Clear	3.00	3.40	20	14000	23000	15
1004WC2R-W5-3PC	InGaN	Neutral White	x=0.33	y=0.32		3.00	3.40		14000	23000	
1004WC2R-W6-3PC	InGaN	Warm White	x=0.43	y=0.40		3.00	3.40		14000	23000	

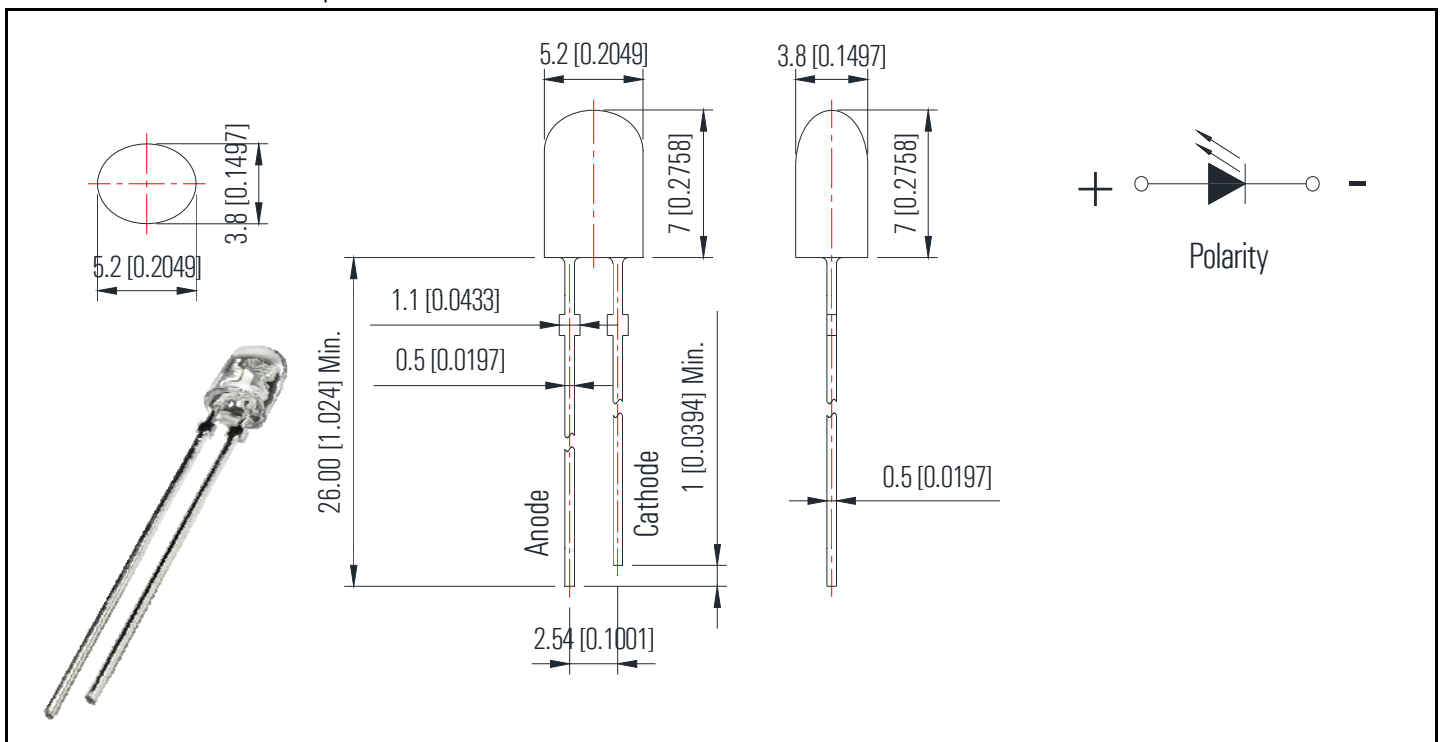
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 3.9x3.2mm Oval White LED Lamps



434WC2Q-W2-3P-T	InGaN	Cool White	x=0.28	y=0.28	Water Clear	3.00	3.40	20	2900	4500	110/40
434WM2Q-W2-3P-T	InGaN	Cool White	x=0.28	y=0.28	White Diffused	3.00	3.40		2200	3800	

### 5.2x3.8mm Oval White LED Lamps

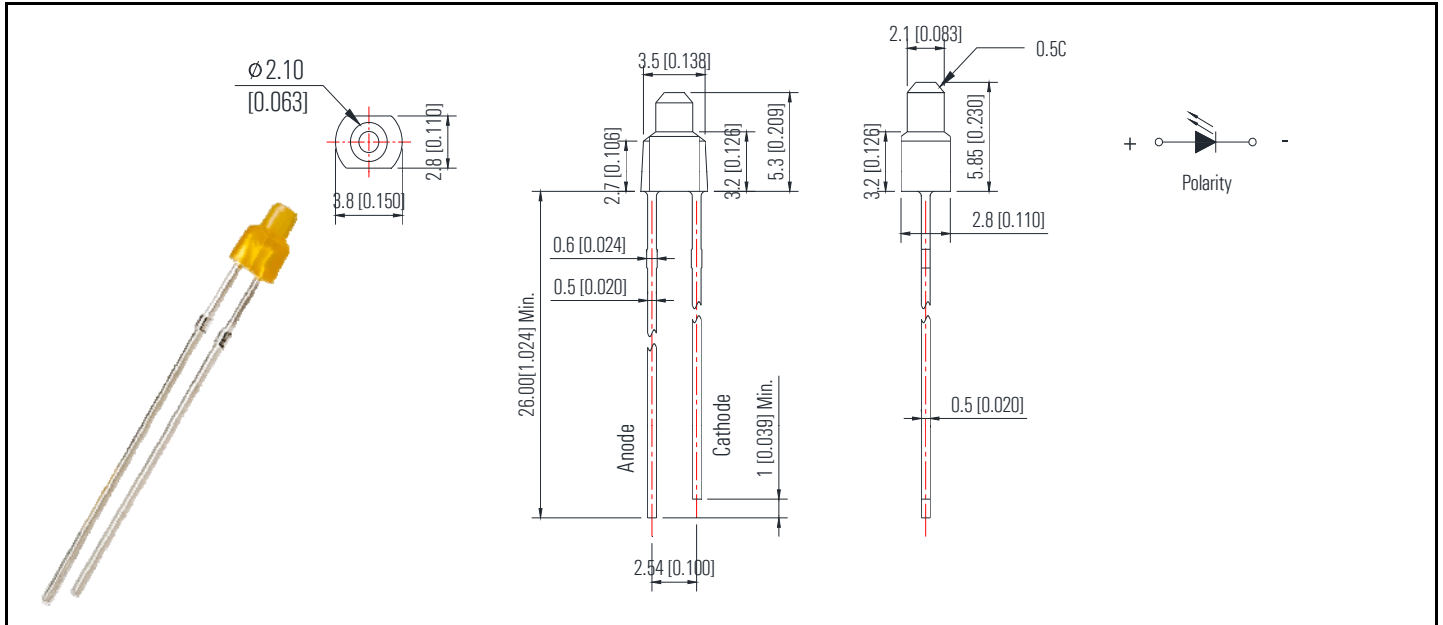


544WC2I-W2-3P-T	InGaN	Cool White	x=0.28	y=0.28	Water Clear	3.00	3.40	20	3800	6500	110/40
544WM2I-W2-3P-T	InGaN	Cool White	x=0.28	y=0.28	White Diffused	3.00	3.40		2200	3800	



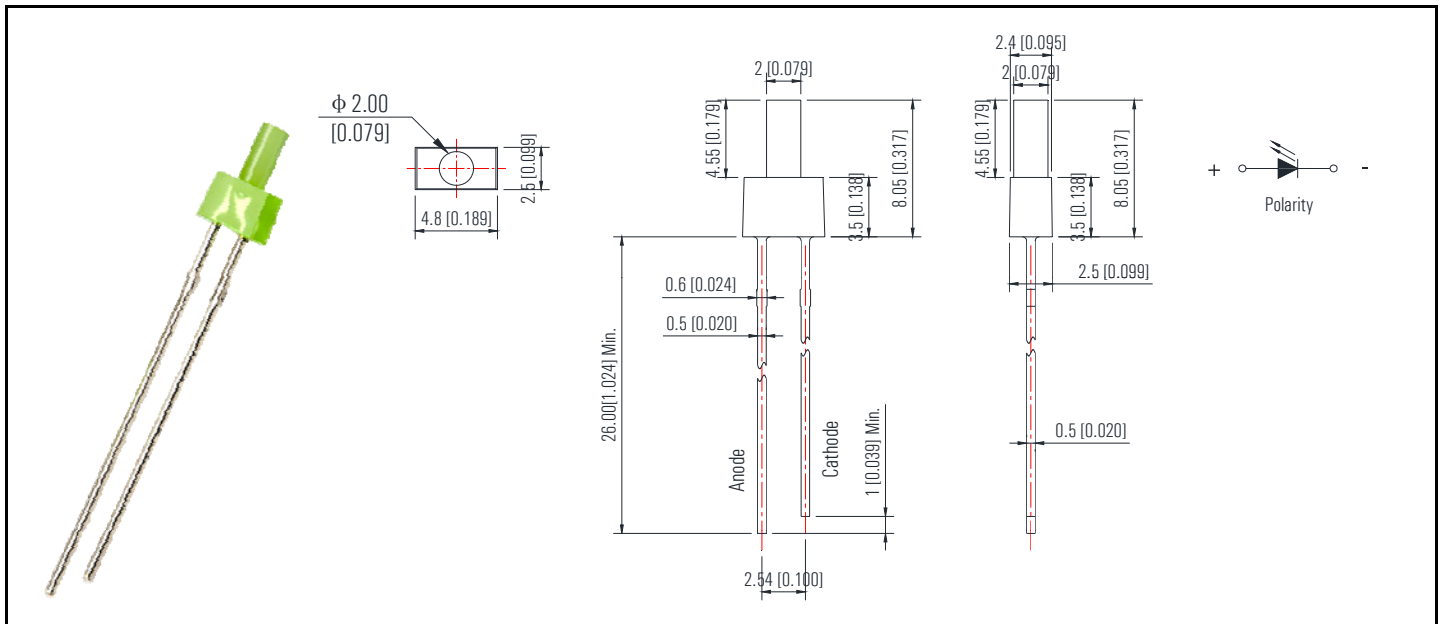
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

## 2mm Tower Type LED Lamps



204VD2L-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	70	120	150
204AD2L-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		45	90	
204YD2L-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		30	70	
204GD2L-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		13	30	
204PGD2L-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		460	780	120
204BD2L-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60	120	210		

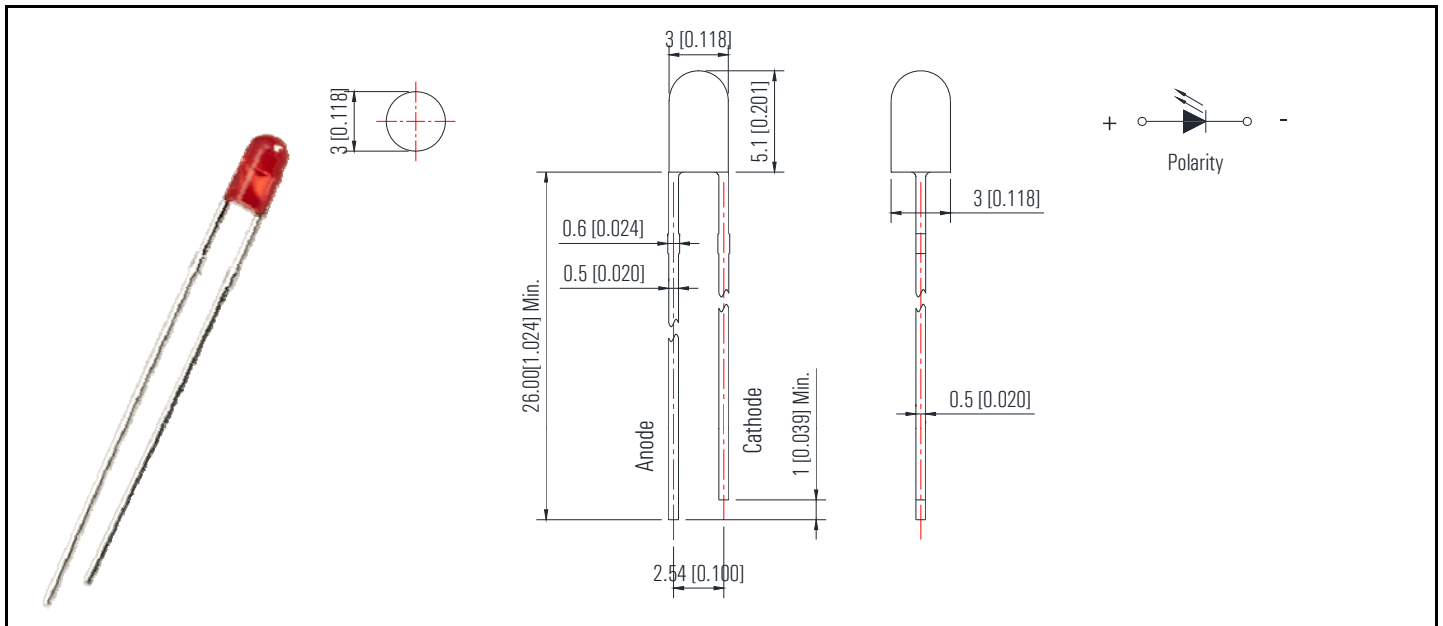
## 2mm Tower Type LED Lamps



204VD1F-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	30	70	130
204AD1F-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		20	45	
204YD1F-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		20	45	
204GD1F-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		13	30	
204PGD1F-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		460	780	
204BD1F-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60	160	270		

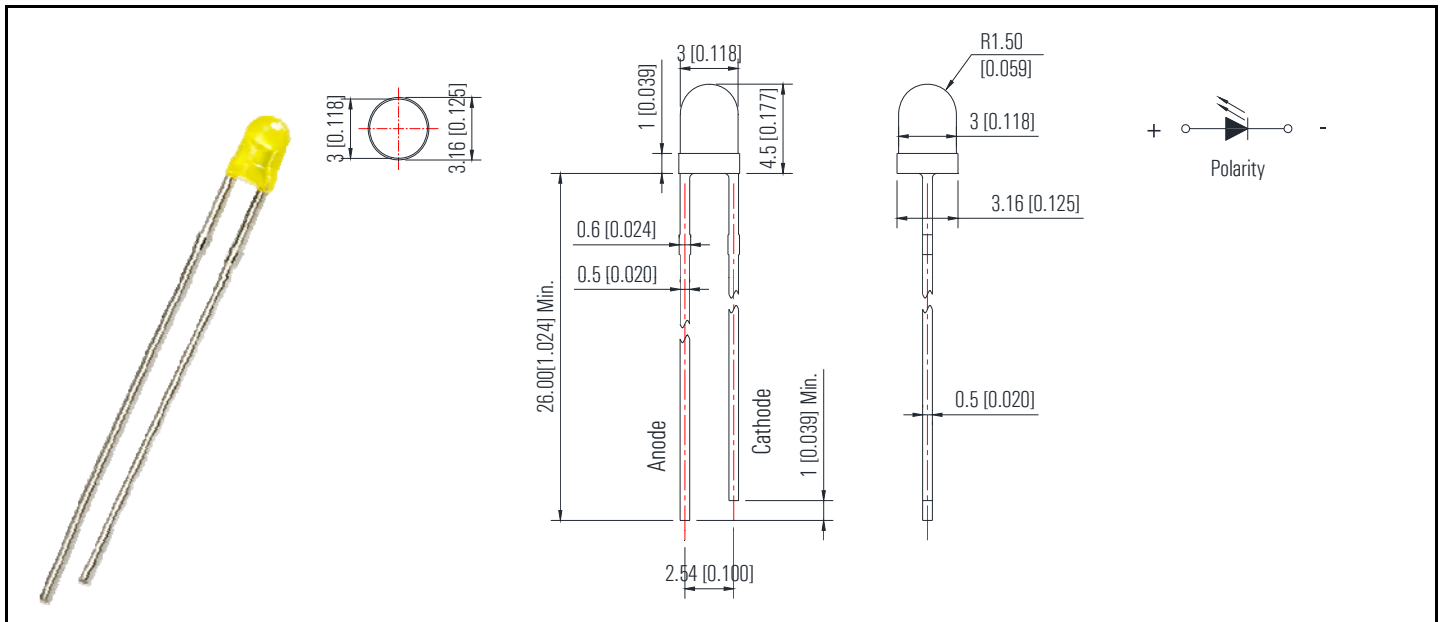
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ ½

### 3mm Round Without Flange Type LED Lamps



304VD2J-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	350	600	60
304AD2J-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		160	270	
304YD2J-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		160	270	
304GD2J-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		90	160	
304PGD2J-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		2200	3800	
304BD2J-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		600	1000	

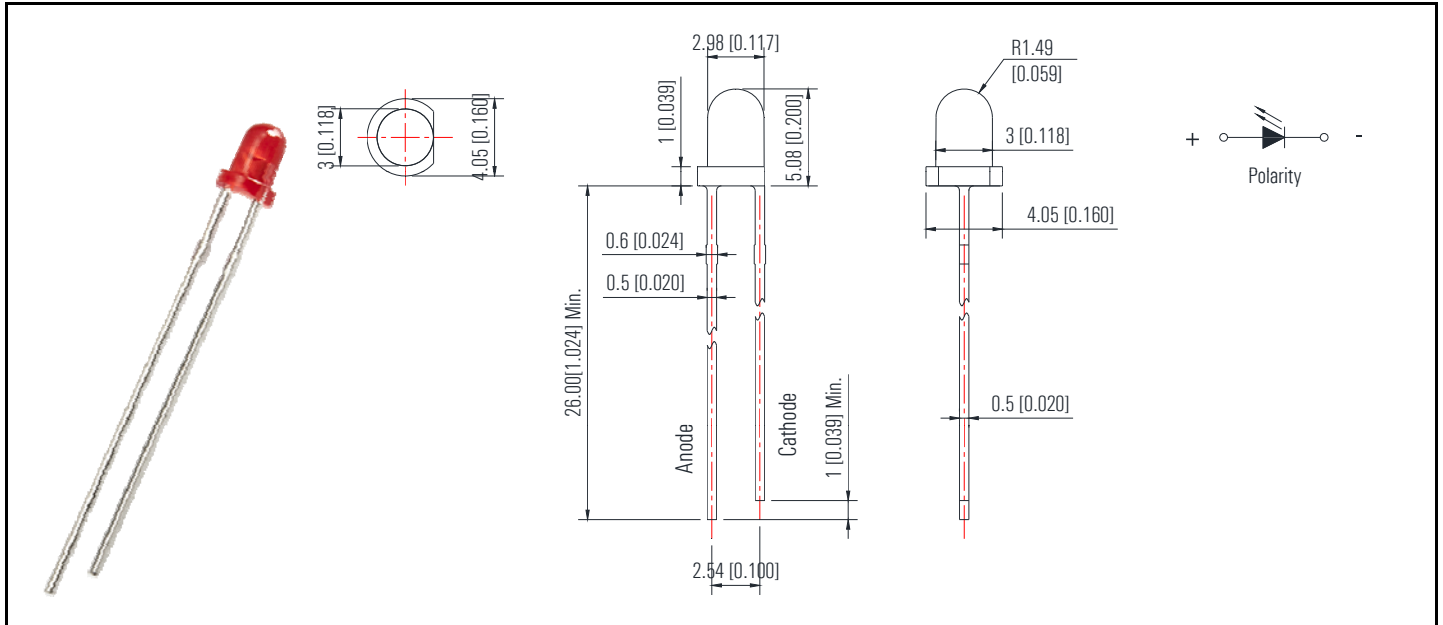
### 3mm Round Standard With Flange LED Lamps, T-1



304VD2P-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	160	270	80
304AD2P-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		90	160	
304YD2P-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		90	160	
304GD2P-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		90	160	
304PGD2P-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		3800	6500	
304BD2P-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		460	780	

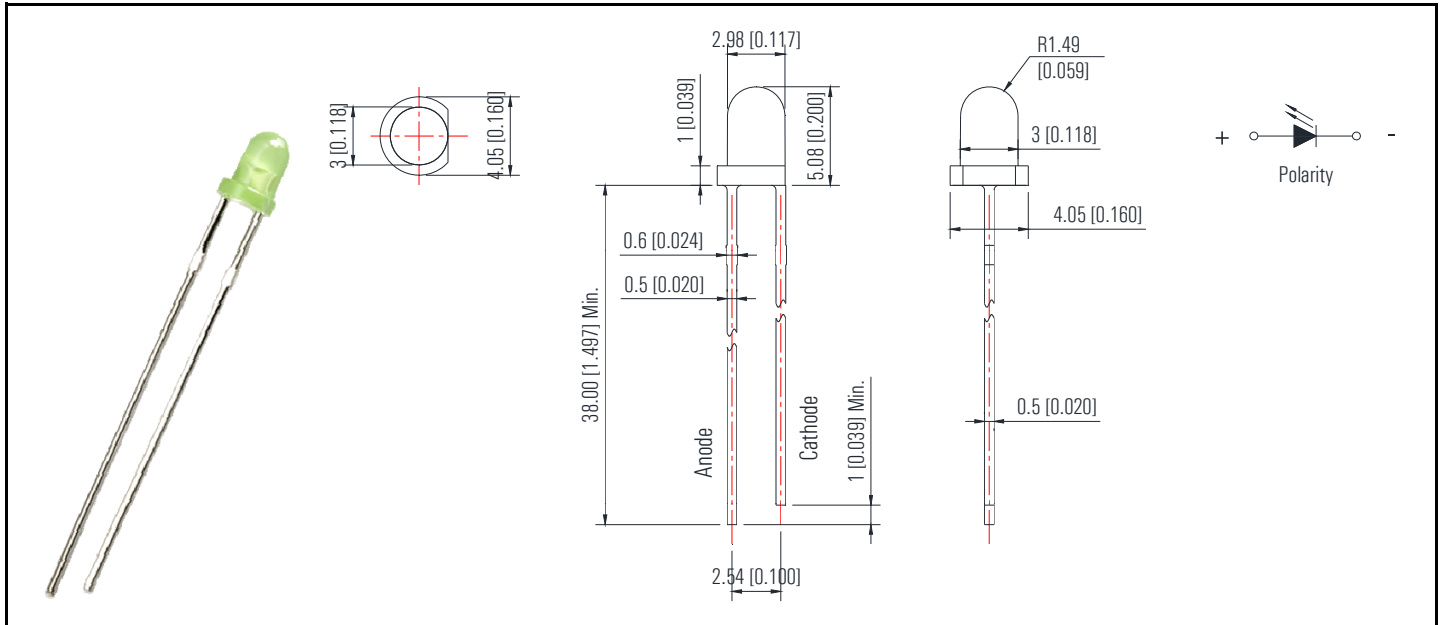
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ ½

### 3mm Round Standard With Flange LED Lamps, T-1



304VD2C-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	270	460	60
304AD2C-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		270	460	
304YD2C-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		210	350	
304GD2C-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		70	120	
304PGD2C-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		2900	5000	
304BD2C-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		780	1300	

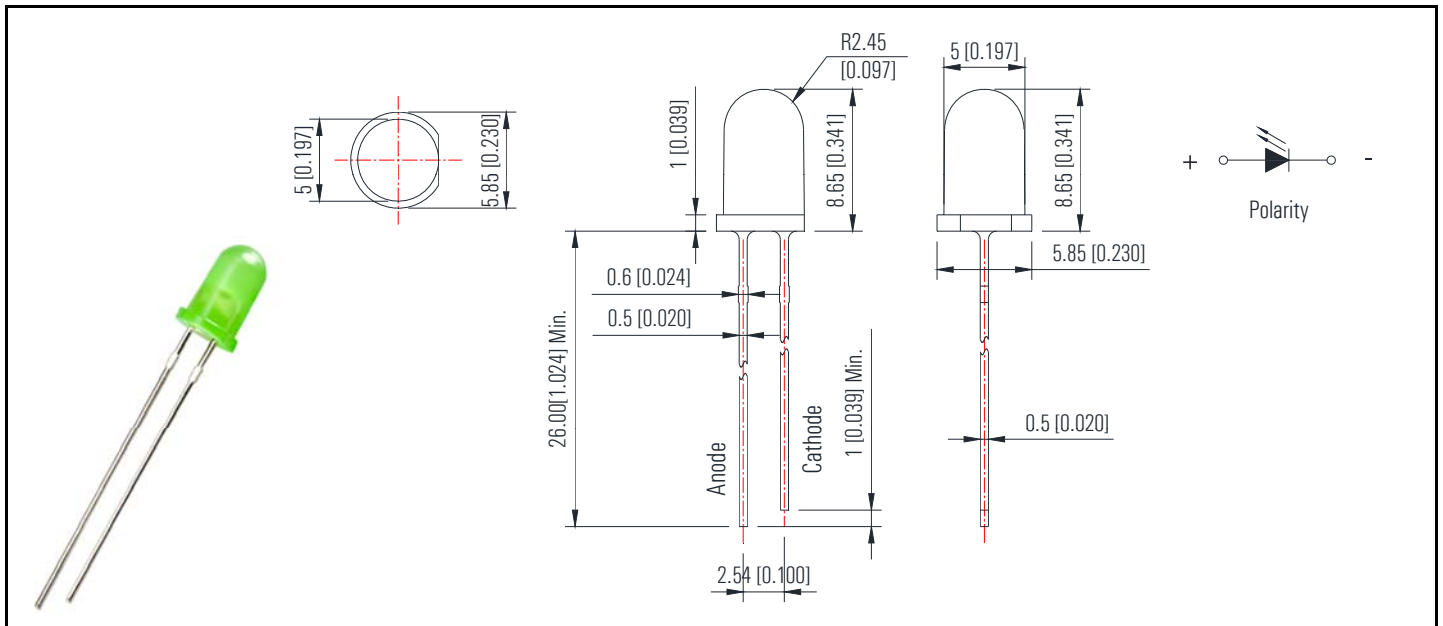
### 3mm Round Standard With Flange LED Lamps, T-1



304VD2C-1B-L38	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	270	460	60
304AD2C-1B-L38	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		270	460	
304YD2C-1B-L38	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		210	350	
304GD2C-1B-L38	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		70	120	

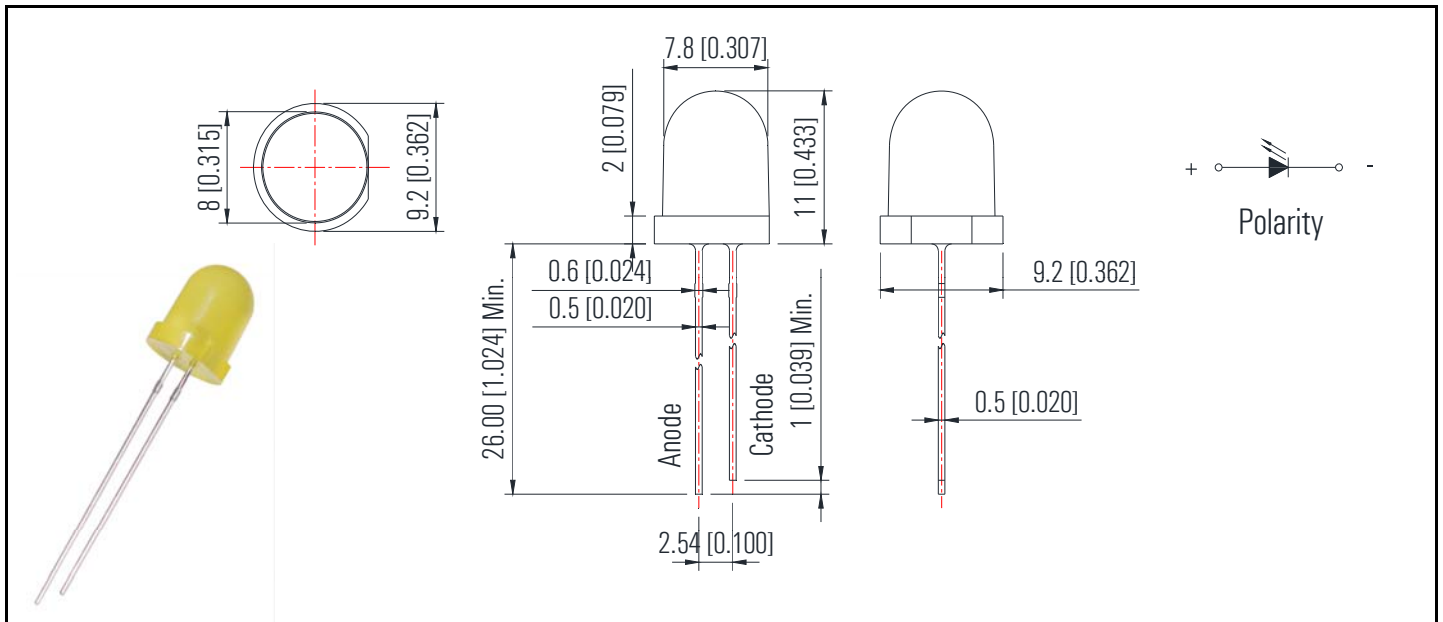
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 5mm Round Standard With Flange LED Lamps, T-1 3/4



503VD2E-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	210	350	60
503AD2E-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		70	120	
503YD2E-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		120	210	
503GD2E-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		30	70	
504PGD2E-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		1300	2900	
504BD2E-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		350	600	

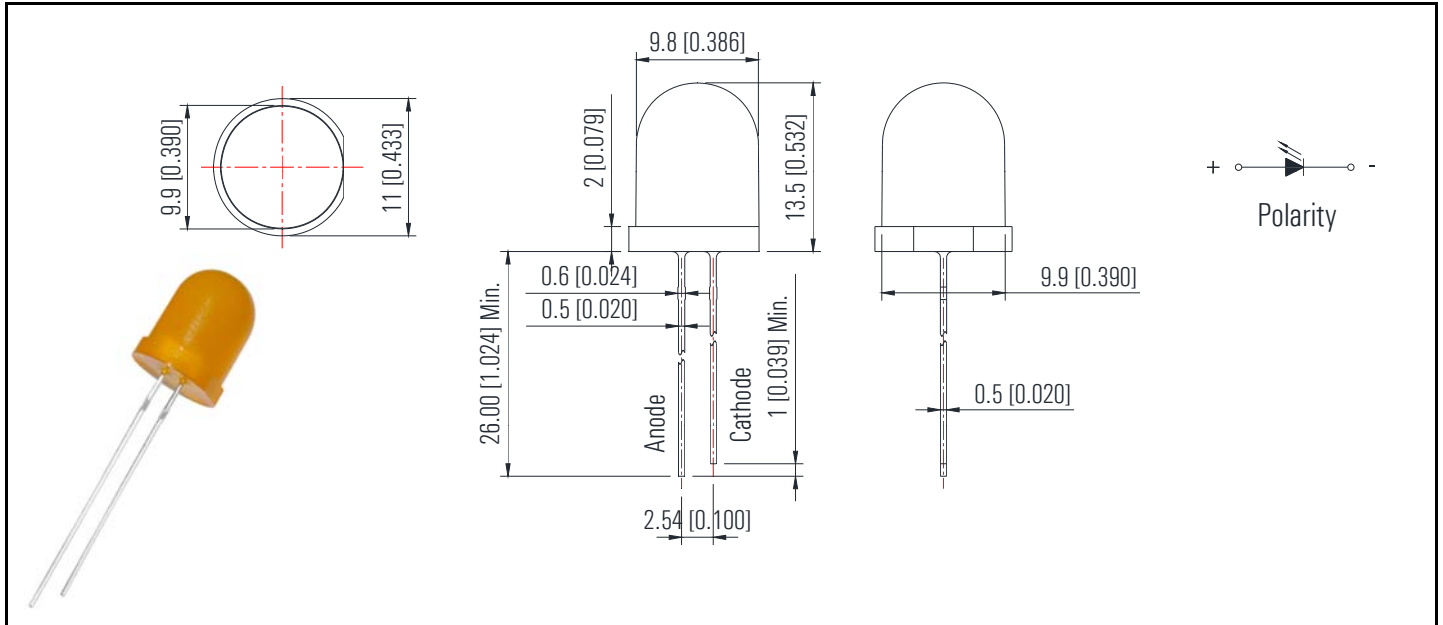
### 8mm Round Standard With Flange LED Lamps



803VD2C-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	160	270	60
803AD2C-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		160	270	
803YD2C-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		210	350	
803GD2C-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		45	90	
804PGD2C-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		2900	5000	
804BD2C-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		460	780	

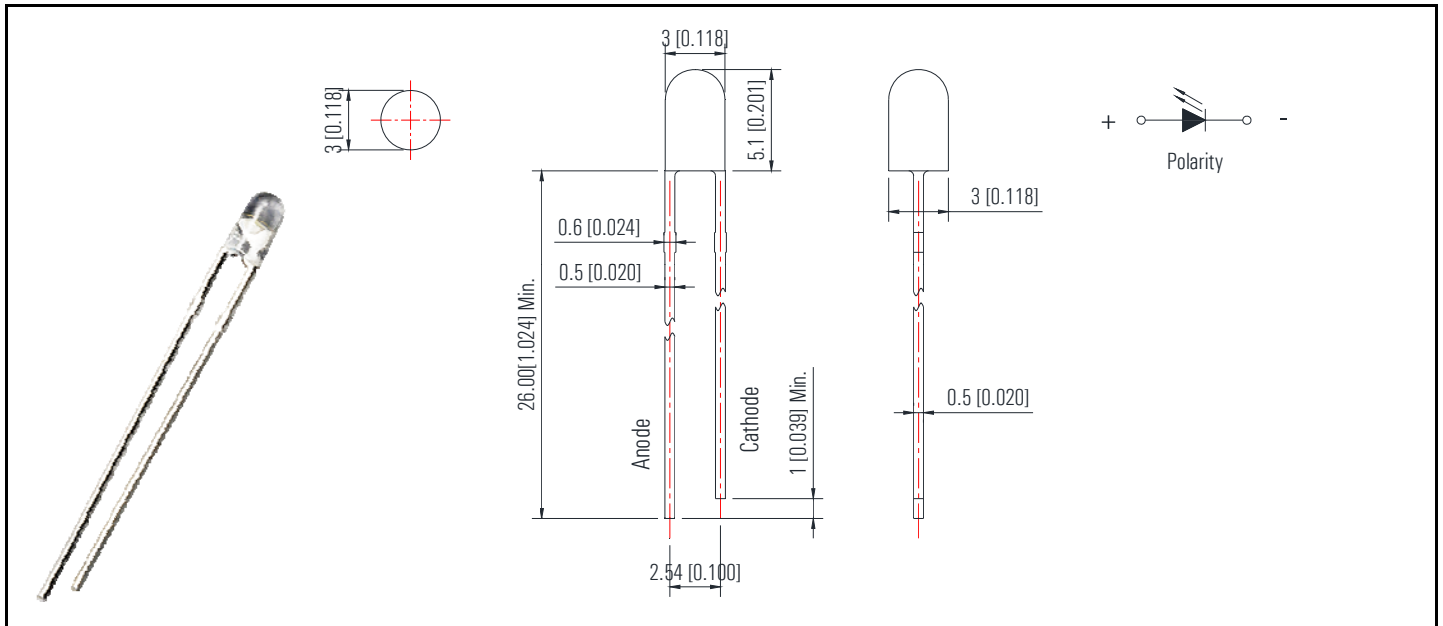
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 10mm Round Standard With Flange LED Lamps



1003VD2R-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	160	270	60
1003AD2R-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		120	210	
1003YD2R-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		120	210	
1003GD2R-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		20	45	
1004PGD2R-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		1700	2900	
1004BD2R-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		210	350	

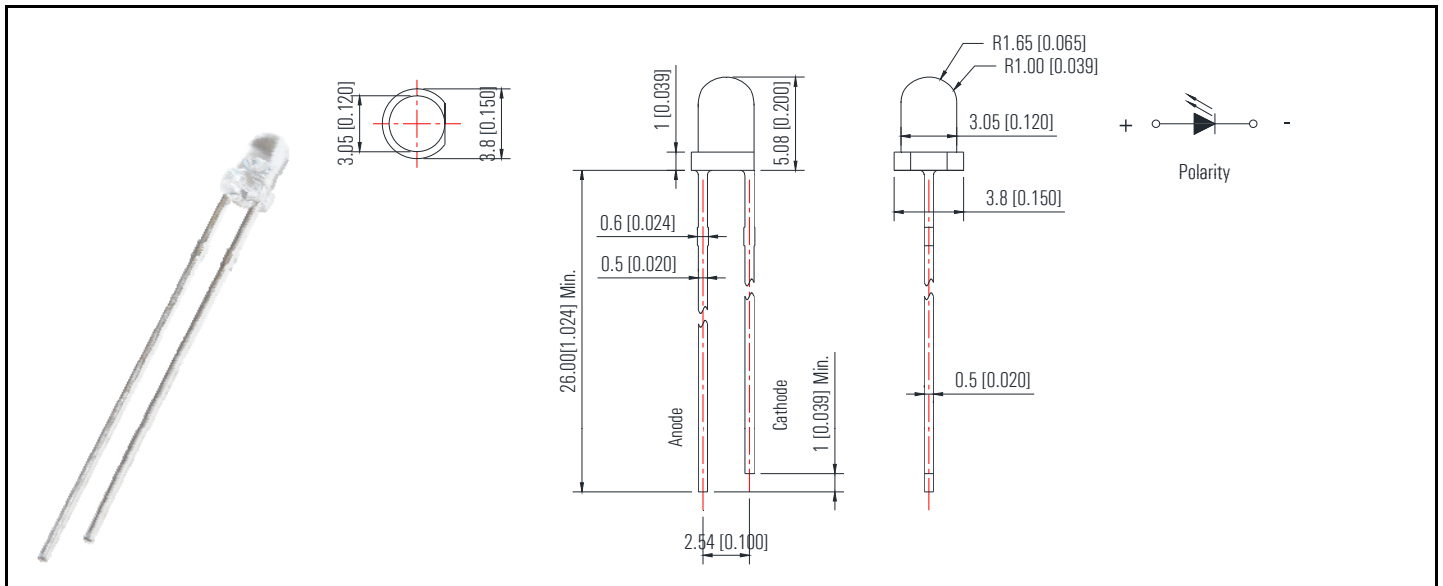
### 3mm Round Without Flange Super Bright LED Lamps



304VC2J-2BD	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	600	1000	30
304AC2J-2BD	AlGaInP	Super Bright Orange	610	605		2.00	2.40		1000	1700	
304YC2J-2BD	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		600	1000	
304PGC2J-G5-2BD	InGaN	Pure Green	520	525		3.20	3.60		11000	18000	
304BC2J-B4-2BD	InGaN	Blue	468	470		3.20	3.60		2900	5000	

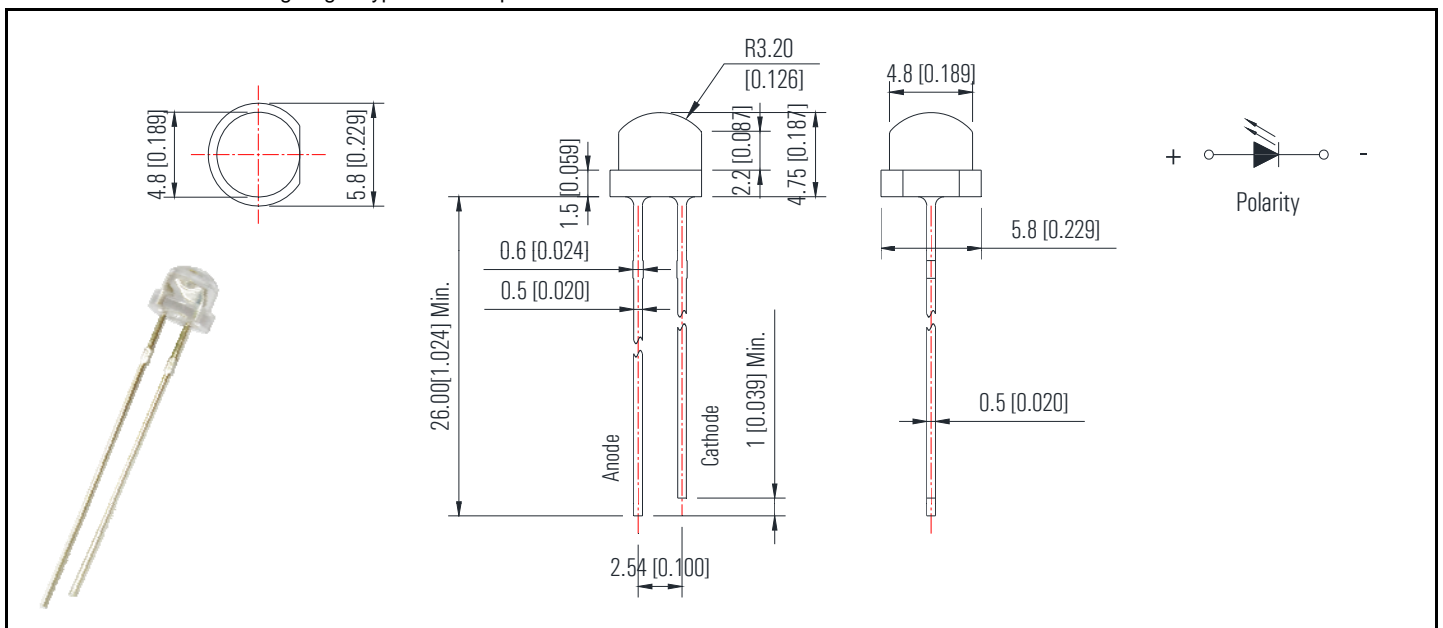
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ ½

### 3mm Round Standard With Flange Super Bright LED Lamps, T-1



304VC4B-2BD	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	600	1000	30
304AC4B-2BD	AlGaInP	Super Bright Orange	610	605		2.00	2.40		600	1000	
304YC4B-2BD	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		600	1000	
304GC4B-1BD	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		160	270	
304PGC4B-G5-2BD	InGaIn	Pure Green	520	525		3.20	3.60		11000	18000	
304BC4B-B4-2BD	InGaIn	Blue	468	470		3.20	3.60		2200	3800	
304UVAC4B-Q5D	InGaIn	UV	395	/		3.20	4.00		45	90	
304UVAC4B-Q6D	InGaIn	UV	400	/	3.20	4.00	45	90	25		

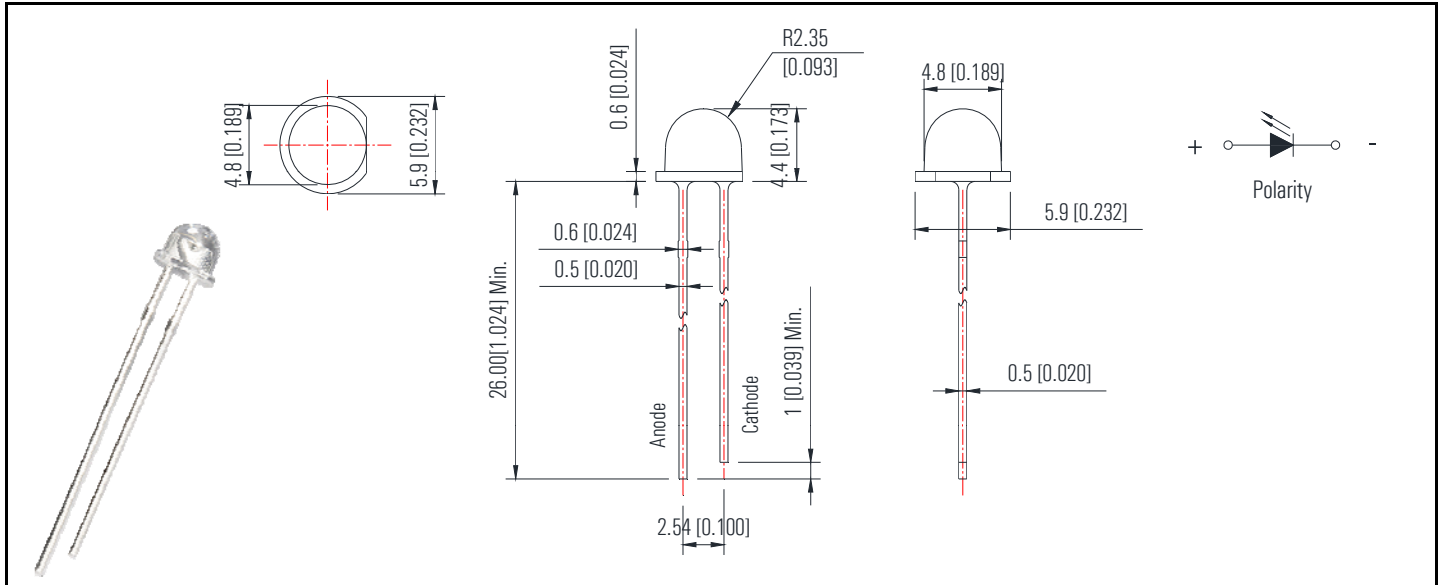
### 4.80mm Round Wide Viewing Angle Type LED Lamps



483VC1C-1B	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	160	270	100
483AC1C-1B	AlGaInP	Super Bright Orange	610	605		2.00	2.40		160	270	
483YC1C-1B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		210	350	
484PGC1C-G5-2B	InGaIn	Pure Green	520	525		3.20	3.60	80	2900	5000	
484BC1C-B4-2B	InGaIn	Blue	468	470		3.20	3.60		600	1000	

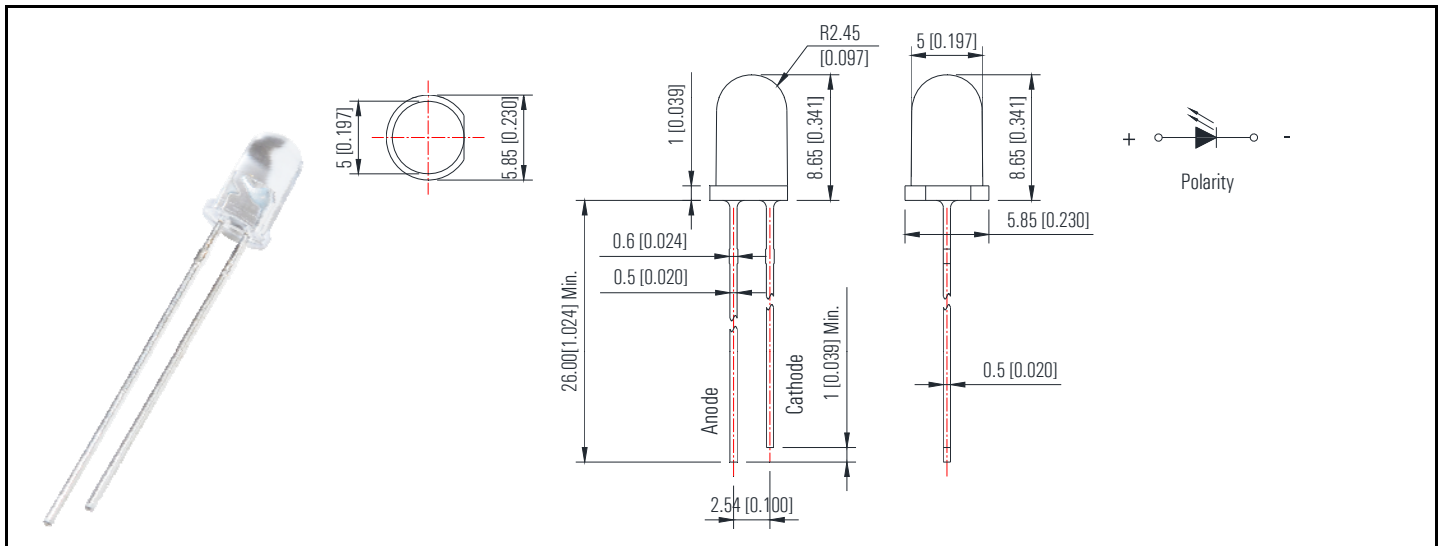
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ 1/2

### 4.80mm Round Wide Viewing Angle Type LED Lamps



483VC1F-1B	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	270	460	100
483AC1F-1B	AlGaInP	Super Bright Orange	610	605		2.00	2.40		270	460	
483YC1F-1B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		270	460	
484PGC1F-G5-2B	InGaN	Pure Green	520	525		3.20	3.60		3800	6500	60
484BC1F-B4-2B	InGaN	Blue	468	470		3.20	3.60		780	1300	

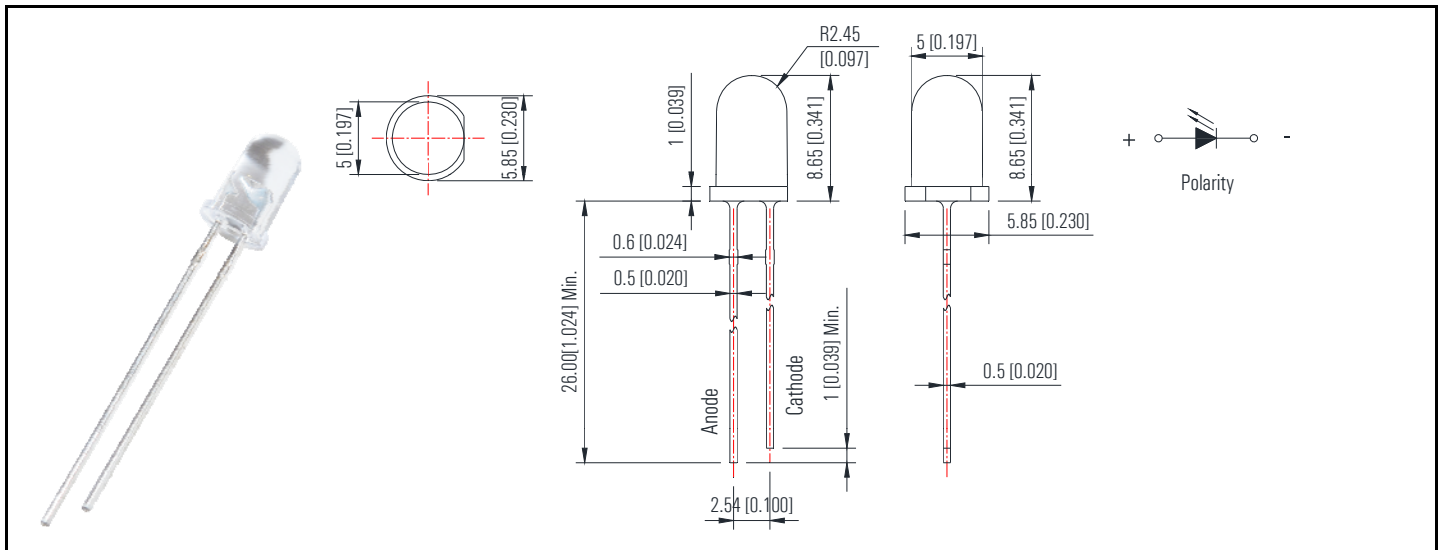
### 5mm Round Standard With Flange Super Bright LED Lamps, 15°, T-1 3/4



503VC2E-2BC	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	2900	5000	15
503VC2E-4CC	AlGaInP	Super Bright Red	632	624		2.00	2.40		8500	14000	
503AC2E-2BC	AlGaInP	Super Bright Orange	610	605		2.00	2.40		1700	2900	
503AC2E-4CC	AlGaInP	Super Bright Orange	610	605		2.00	2.40		6500	11000	
503YC2E-2BC	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		2900	5000	
503YC2E-4CC	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		8500	14000	
504PGC2E-G5-2BC	InGaN	Pure Green	520	525		3.20	3.60		23000	39000	
504BC2E-B4-2BC	InGaN	Blue	468	470		3.20	3.60		6500	11000	
504UVAC2E-Q5C	InGaN	UV	395	/		3.20	4.00		270	350	
504UVAC2E-Q6C	InGaN	UV	400	/	3.20	4.00	270	350			

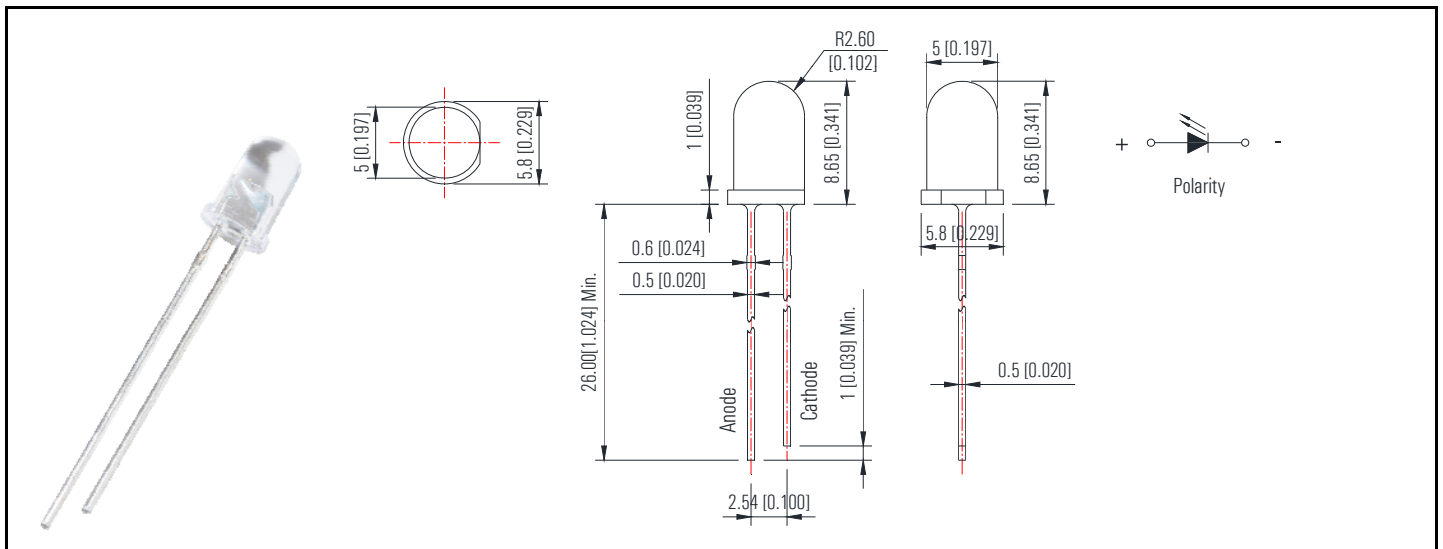
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ 1/2

### 5mm Round Standard With Flange Super Bright LED Lamps, 45°, T-1 3/4



503VC2E-2BE	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	600	1000	45
503VC2E-4CE	AlGaInP	Super Bright Red	632	624		2.00	2.40		2900	5000	
503AC2E-2BE	AlGaInP	Super Bright Orange	610	605		2.00	2.40		780	1300	
503AC2E-4CE	AlGaInP	Super Bright Orange	610	605		2.00	2.40		2200	3800	
503YC2E-2BE	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		600	1000	
503YC2E-4CE	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		1300	2200	
504PGC2E-G5-2BE	InGaN	Pure Green	520	525		3.20	3.60		14000	23000	
504BC2E-B4-2BE	InGaN	Blue	468	470		3.20	3.60		2900	5000	

### 5mm Round Standard With Flange Super Bright LED Lamps, T-1 3/4

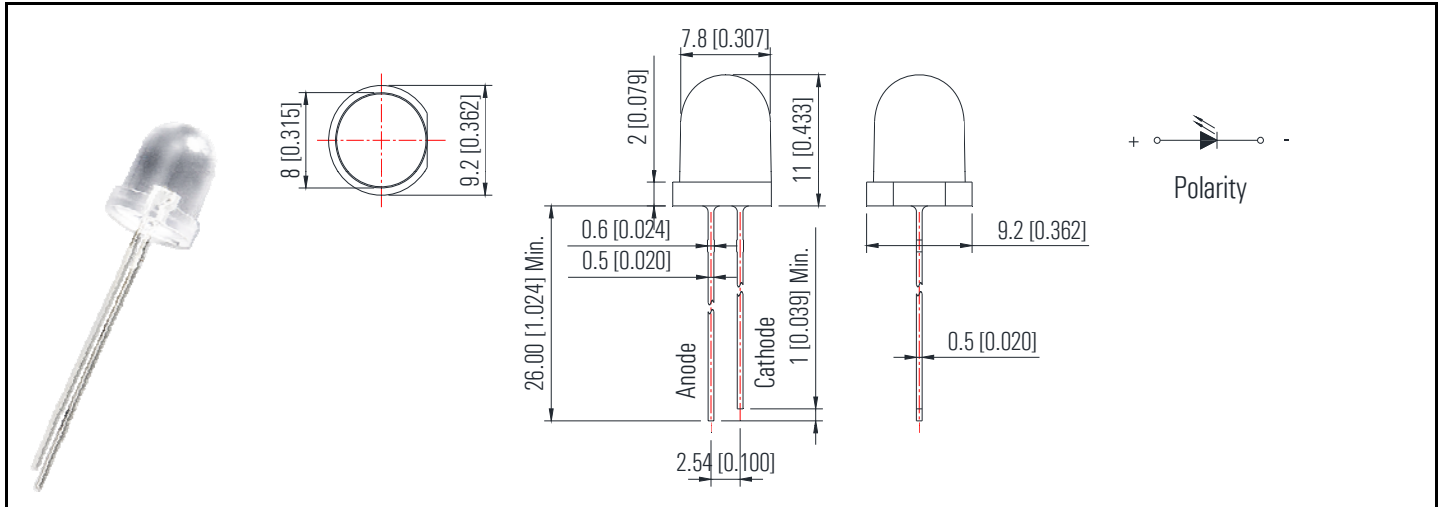


503VC2V-2BD	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	780	1300	30
503VC2V-4CD	AlGaInP	Super Bright Red	632	624		2.00	2.40		2900	5000	
503AC2V-2BD	AlGaInP	Super Bright Orange	610	605		2.00	2.40		1300	2200	
503AC2V-4CD	AlGaInP	Super Bright Orange	610	605		2.00	2.40		2900	5000	
503YC2V-2BD	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		1000	1700	
503YC2V-4CD	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		2900	5000	
504PGC2V-G5-2BD	InGaN	Pure Green	520	525		3.20	3.60		14000	23000	
504BC2V-B4-2BD	InGaN	Blue	468	470		3.20	3.60		2900	5000	
504UVAC2V-Q5D	InGaN	UV	395	/	3.20	4.00	160	270	25		
504UVAC2V-Q6D	InGaN	UV	400	/	3.20	4.00	160	270			



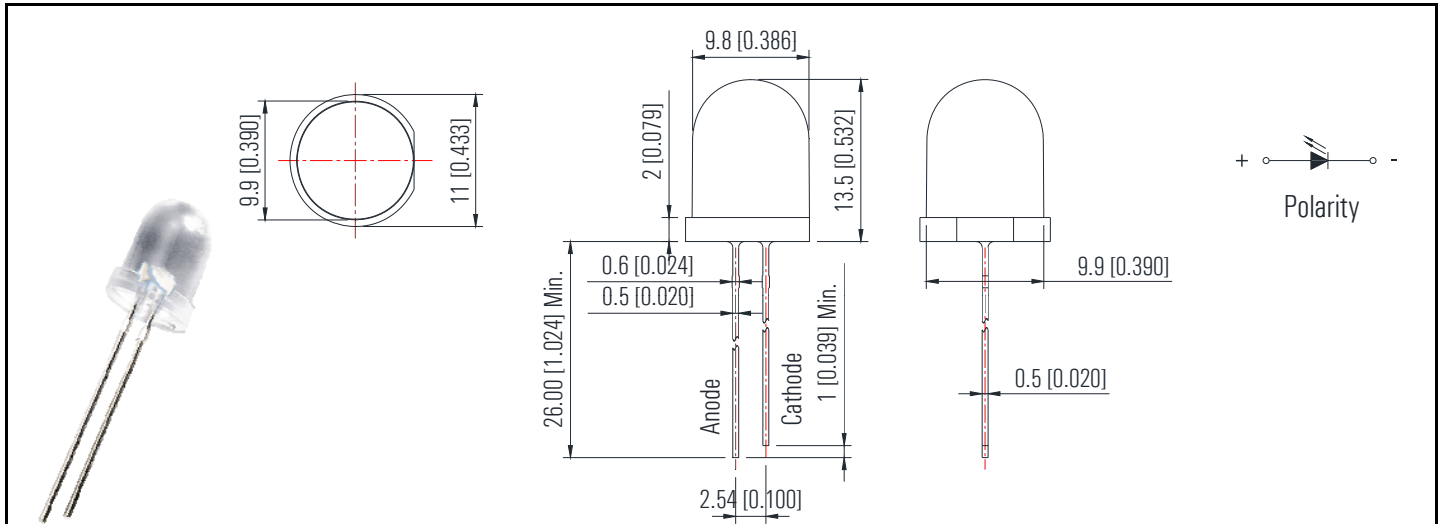
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ ½

### 8mm Round With Flange Super Bright LED Lamps



803VC2C-2BD	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	1300	2200	30
803VC2C-4CD	AlGaInP	Super Bright Red	632	624		2.00	2.40		3800	6500	
803AC2C-2BD	AlGaInP	Super Bright Orange	610	605		2.00	2.40		1000	1700	
803AC2C-4CD	AlGaInP	Super Bright Orange	610	605		2.00	2.40		3800	6500	
803YC2C-2BD	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		780	1300	
803YC2C-4CD	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		1700	2900	
804PGC2C-G5-2BD	InGaN	Pure Green	520	525		3.20	3.60		11000	18000	25
804BC2C-B4-2BD	InGaN	Blue	468	470		3.20	3.60		2900	5000	
804UVAC2C-Q5D	InGaN	UV	395	/		3.20	4.00		90	160	20
804UVAC2C-Q6D	InGaN	UV	400	/		3.20	4.00		120	210	

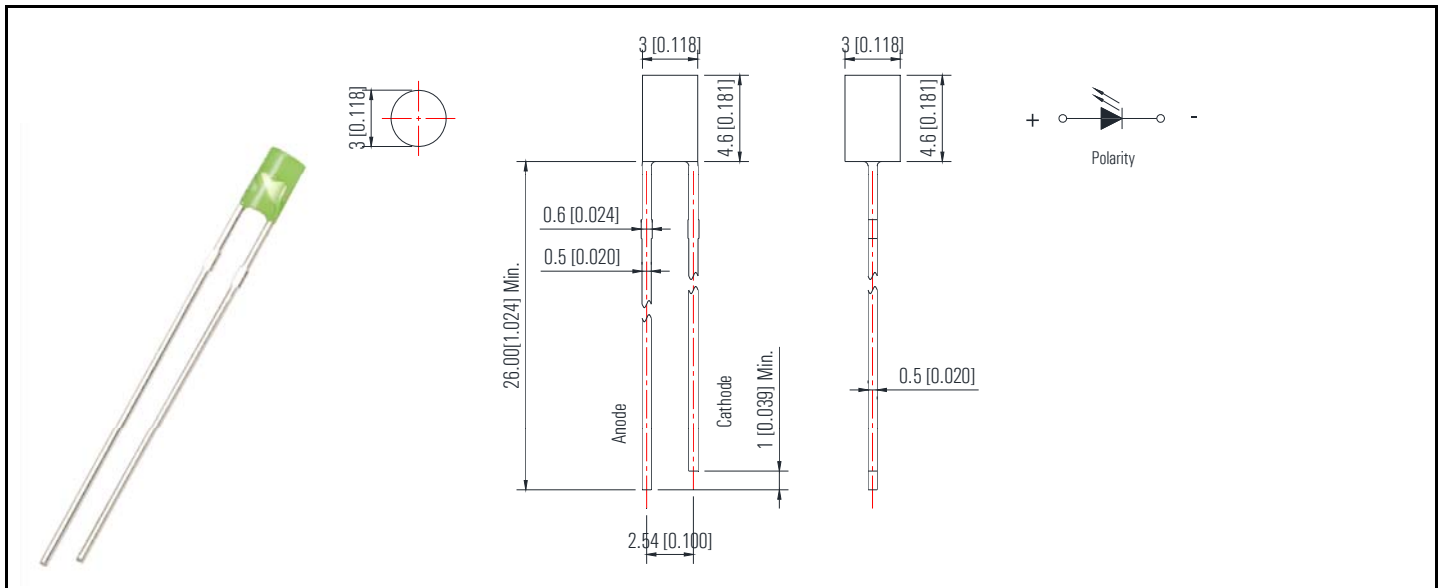
### 10mm Round With Flange Super Bright LED Lamps



1003VC2R-2BC	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	1300	2200	20
1003VC2R-4CC	AlGaInP	Super Bright Red	632	624		2.00	2.40		6500	11000	
1003AC2R-2BC	AlGaInP	Super Bright Orange	610	605		2.00	2.40		1300	2200	
1003AC2R-4CC	AlGaInP	Super Bright Orange	610	605		2.00	2.40		8500	14000	
1003YC2R-2BC	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		1700	2900	
1003YC2R-4CC	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		5000	8500	
1004PGC2R-G5-2BC	InGaN	Pure Green	520	525		3.20	3.60		30000	51000	
1004BC2R-B4-2BC	InGaN	Blue	468	470		3.20	3.60		5000	8500	
1004UVAC2R-Q5C	InGaN	UV	395	/		3.20	4.00		120	210	
1004UVAC2R-Q6C	InGaN	UV	400	/		3.20	4.00		120	210	

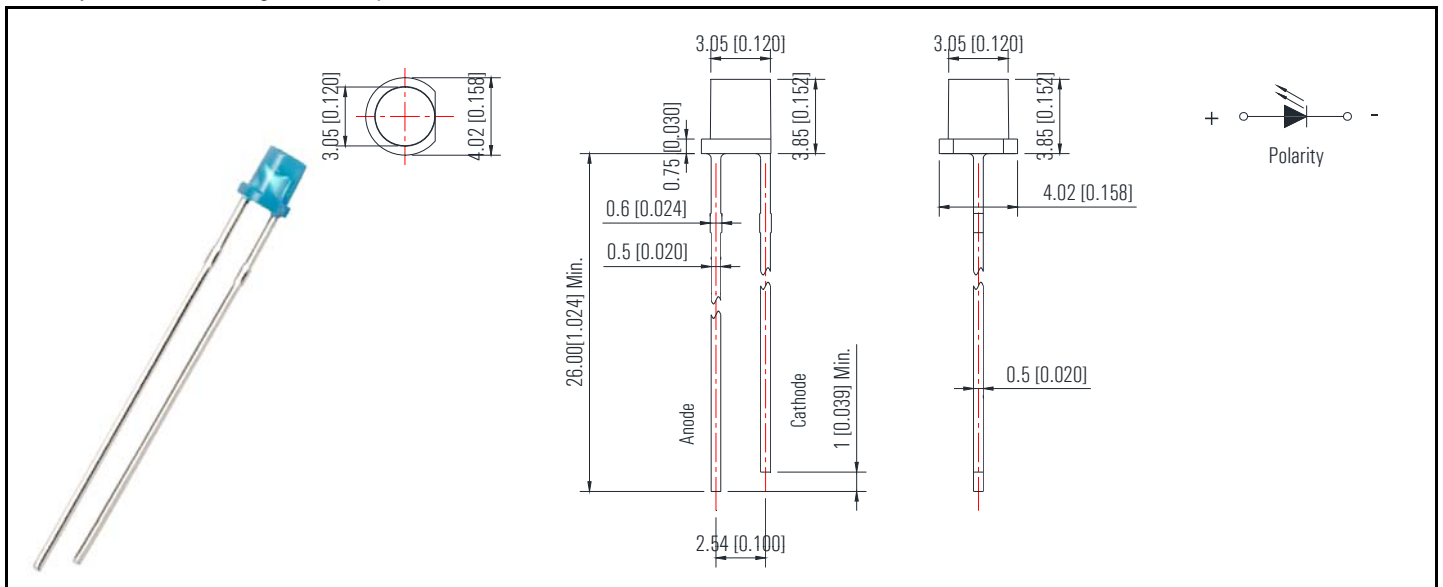
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ ½

### 3mm Cylindrical Without Flange Type LED Lamps



304VD4J-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	70	120	130
304AD4J-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		45	90	
304YD4J-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		70	120	
304GD4J-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		20	45	110
304PGD4J-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		1300	2200	
304BD4J-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		210	350	

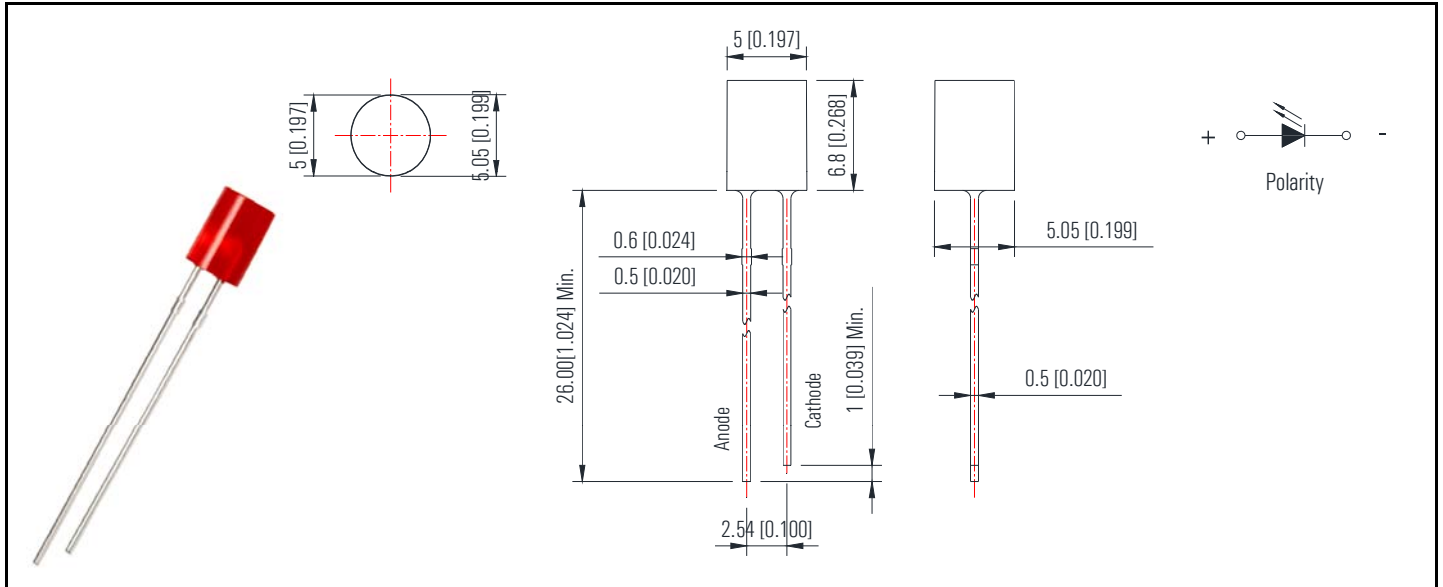
### 3mm Cylindrical With Flange LED Lamps



304VD1X-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	70	120	130
304AD1X-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		90	160	
304YD1X-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		45	90	
304GD1X-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		13	30	110
304PGD1X-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		1300	2200	
304BD1X-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		210	350	

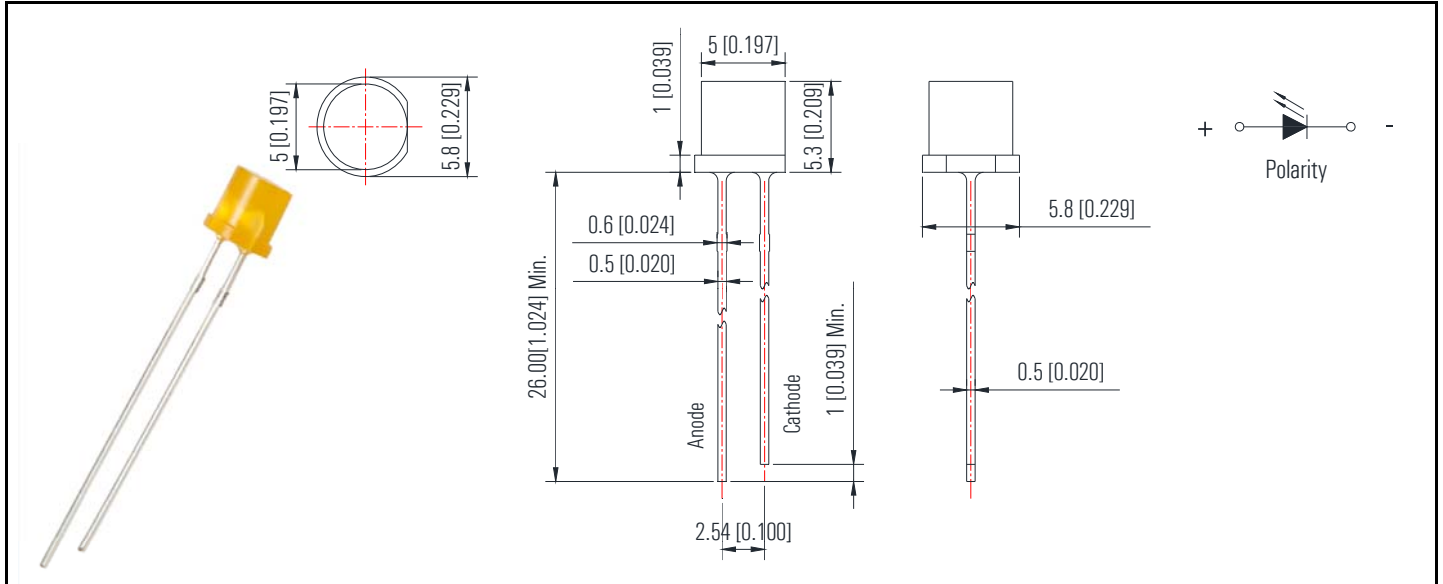
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ ½

### 5mm Cylindrical Without Flange Type LED Lamps



503VD2Q-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	70	120	130
503AD2Q-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		45	90	
503YD2Q-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		70	120	
503GD2Q-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		13	30	
504PGD2Q-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		1000	1700	110
504BD2Q-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60	160	270		

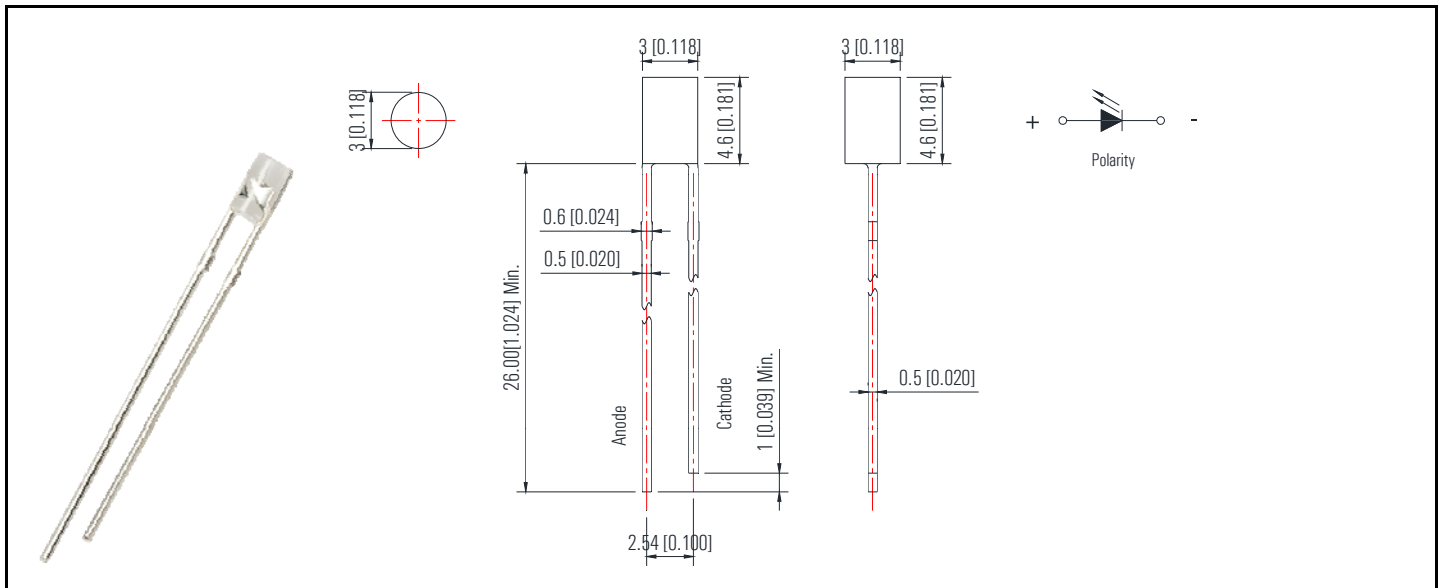
### 5mm Cylindrical With Flange LED Lamps



503VD1E-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	70	120	130
503AD1E-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		70	120	
503YD1E-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		70	120	
503GD1E-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		13	30	
504PGD1E-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		1000	1700	110
504BD1E-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60	210	350		

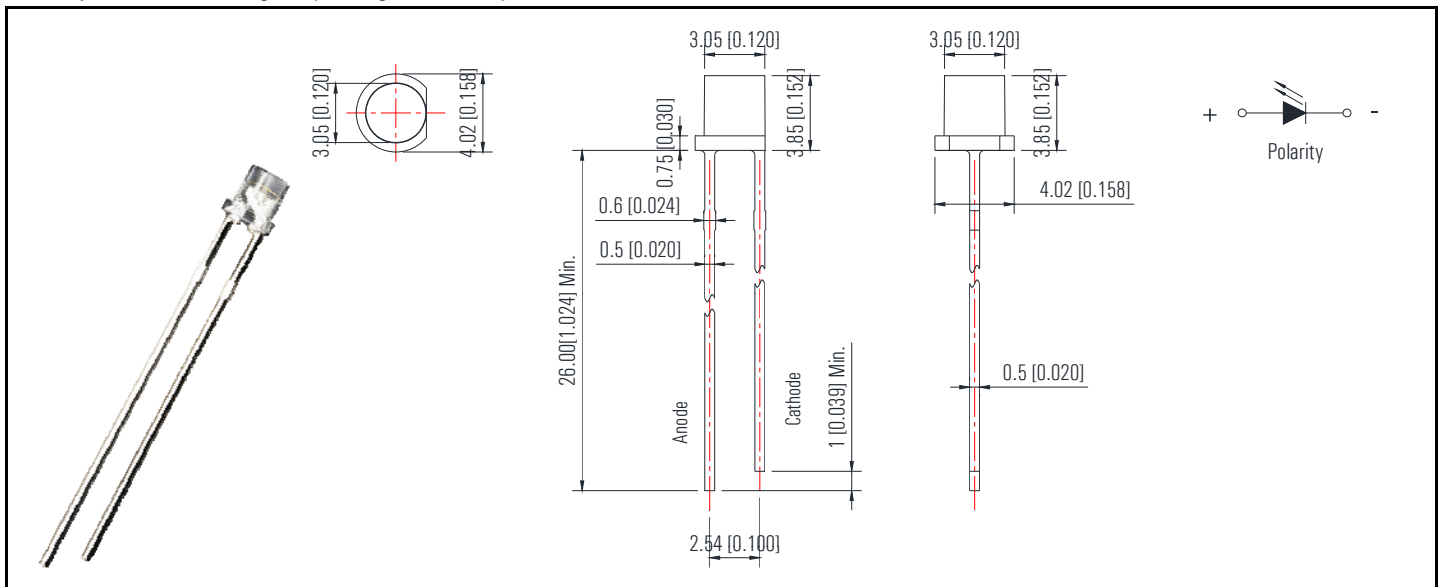
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 3mm Cylindrical Without Flange Type Super Bright LED Lamps



304VC4J-1B	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	160	270	110
304AC4J-2B	AlGaInP	Super Bright Orange	610	605		2.00	2.40		90	160	
304YC4J-1B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		90	160	
304GC4J-1B	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		30	70	
304PGC4J-G5-2B	InGaN	Pure Green	520	525		3.20	3.60		2200	3800	100
304BC4J-B4-2B	InGaN	Blue	468	470		3.20	3.60		460	780	

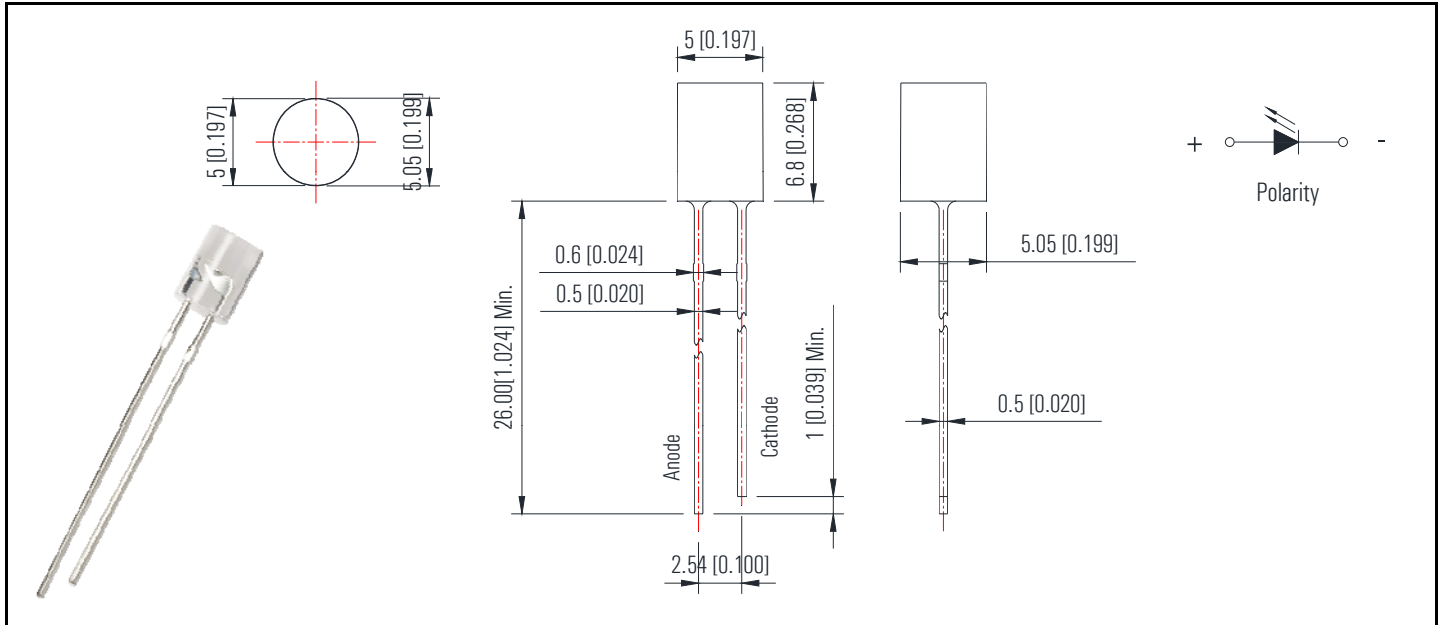
### 3mm Cylindrical With Flange Super Bright LED Lamps



304VC1X-1B	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	90	160	110
304AC1X-2B	AlGaInP	Super Bright Orange	610	605		2.00	2.40		70	120	
304YC1X-1B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		70	120	
304GC1X-1B	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		20	45	
304PGC1X-G5-2B	InGaN	Pure Green	520	525		3.20	3.60		2200	3800	100
304BC1X-B4-2B	InGaN	Blue	468	470		3.20	3.60		350	600	

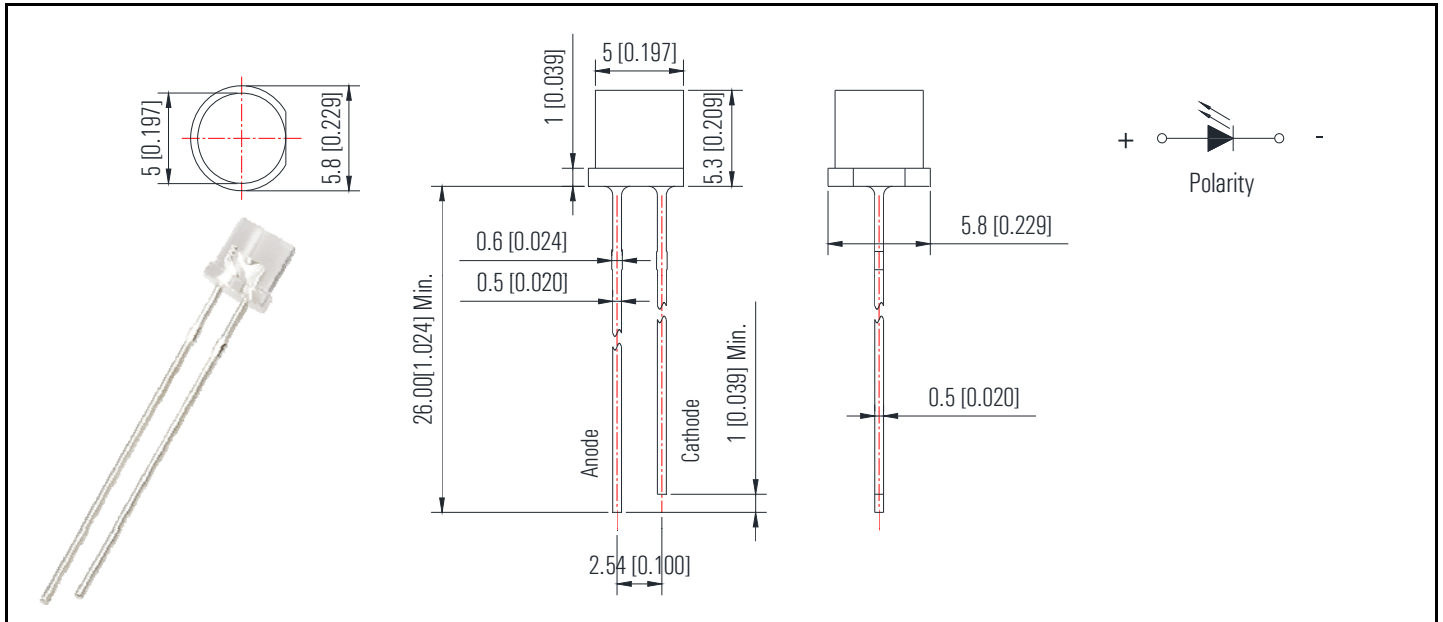
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 5mm Cylindrical Without Flange Type Super Bright LED Lamps



503VC2Q-1B	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	120	210	110
503AC2Q-2B	AlGaInP	Super Bright Orange	610	605		2.00	2.40		160	270	
503YC2Q-1B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		160	270	
503GC2Q-1B	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		30	70	
504PGC2Q-G5-2B	InGaN	Pure Green	520	525		3.20	3.60		2200	3800	100
504BC2Q-B4-2B	InGaN	Blue	468	470		3.20	3.60		460	780	

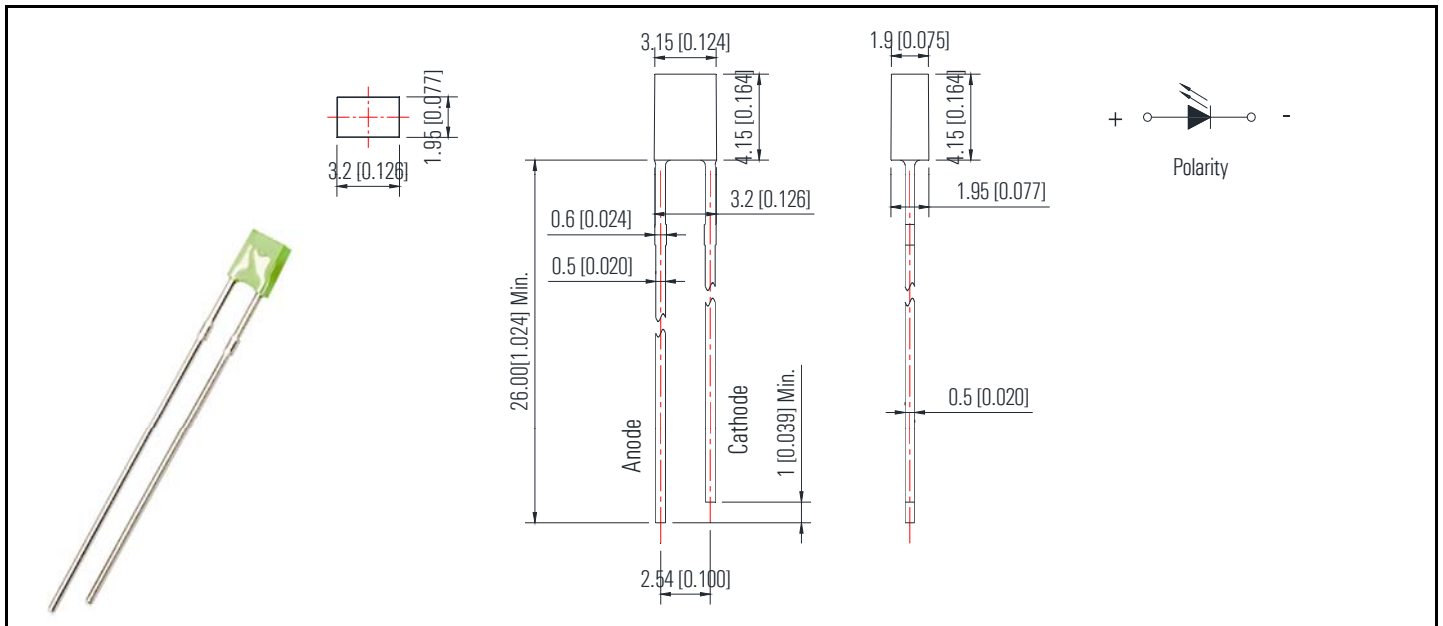
### 5mm Cylindrical With Flange LED Lamps



503VC1E-1B	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	120	210	110
503AC1E-2B	AlGaInP	Super Bright Orange	610	605		2.00	2.40		120	210	
503YC1E-1B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		160	270	
503GC1E-1B	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		20	45	
504PGC1E-G5-2B	InGaN	Pure Green	520	525		3.20	3.60		1300	2200	100
504BC1E-B4-2B	InGaN	Blue	468	470		3.20	3.60		460	780	

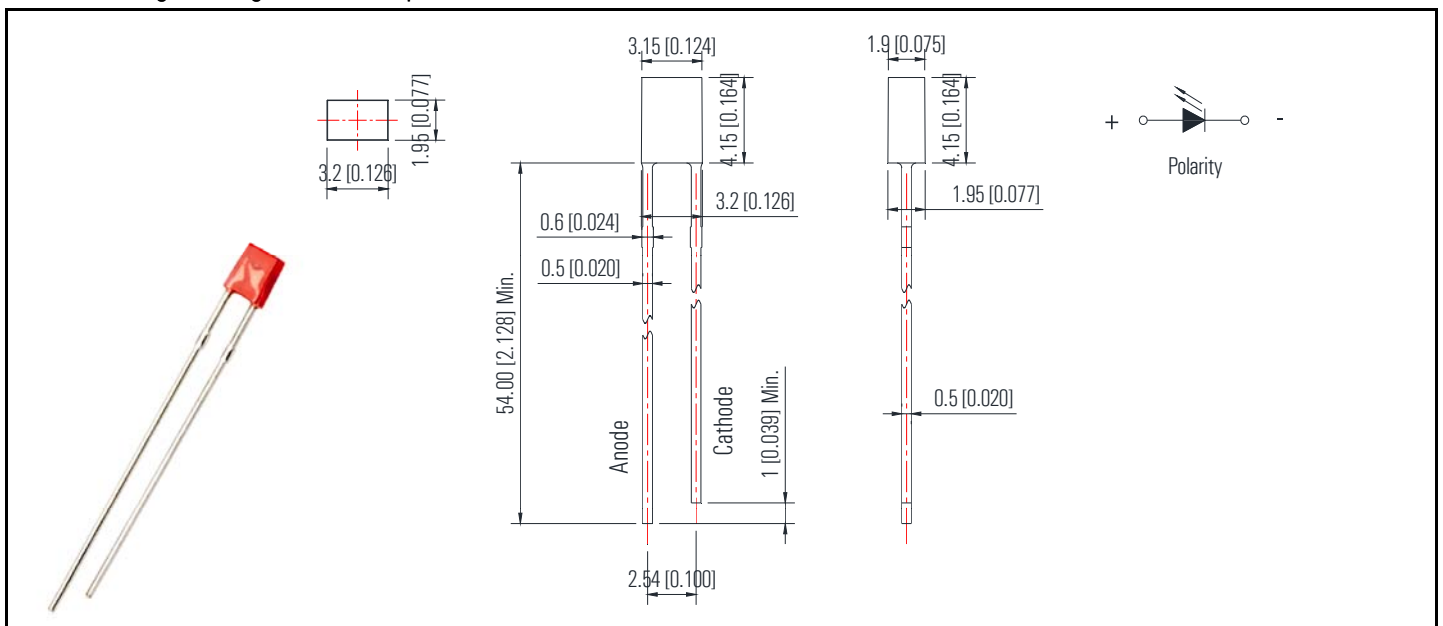
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ ½

### 2x3mm Rectangular Flangeless LED Lamps



234VD2Q-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	70	120	130
234AD2Q-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		45	90	
234YD2Q-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		30	70	
234GD2Q-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		20	45	
234PGD2Q-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		1300	2200	
234BD2Q-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		160	270	

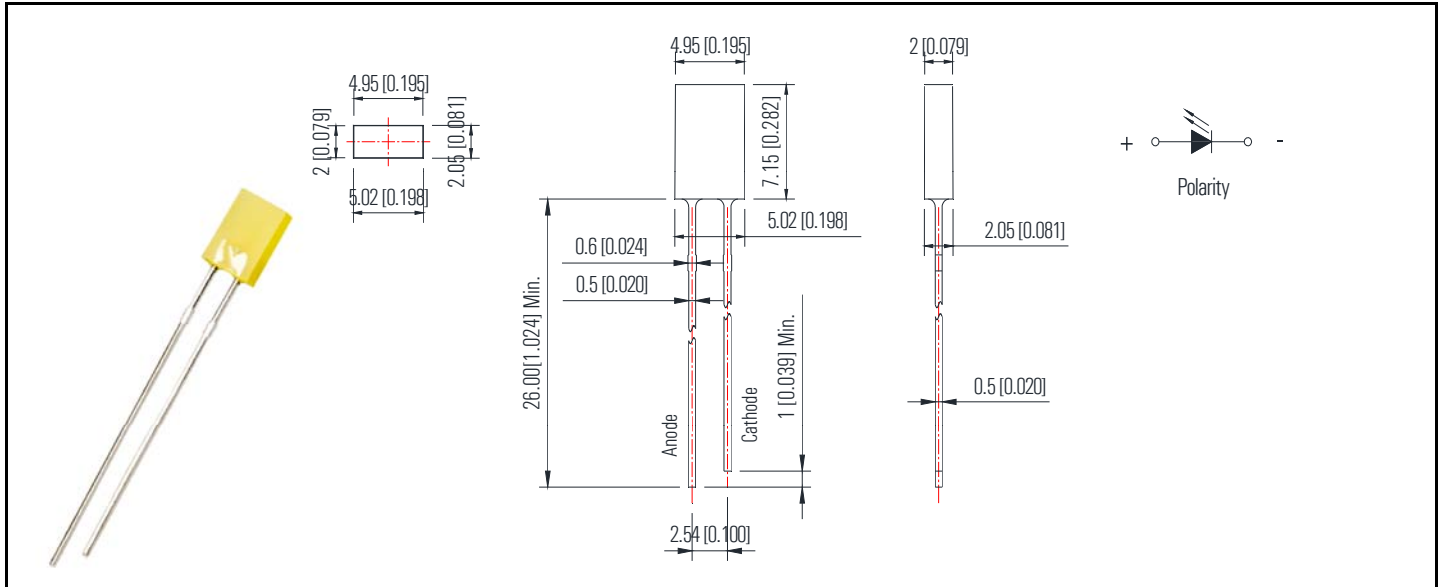
### 2x3mm Rectangular Flangeless LED Lamps



234VD2Q-1B-L54	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	70	120	130
234AD2Q-1B-L54	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		45	90	
234YD2Q-1B-L54	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		30	70	
234GD2Q-1B-L54	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		20	45	

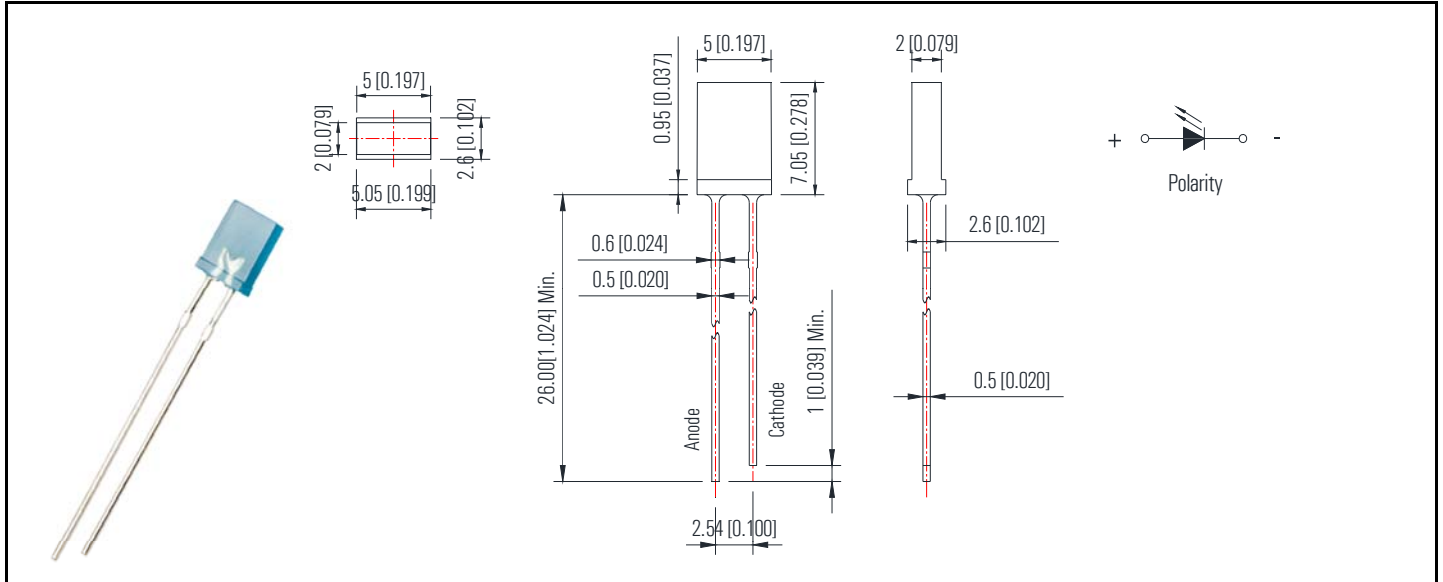
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ ½

### 2x5mm Rectangular Flangeless LED Lamps



253VD1F-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	70	120	130
253AD1F-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		20	45	
253YD1F-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		30	70	
253GD1F-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		13	30	
254PGD1F-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		600	1000	
254BD1F-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		160	270	

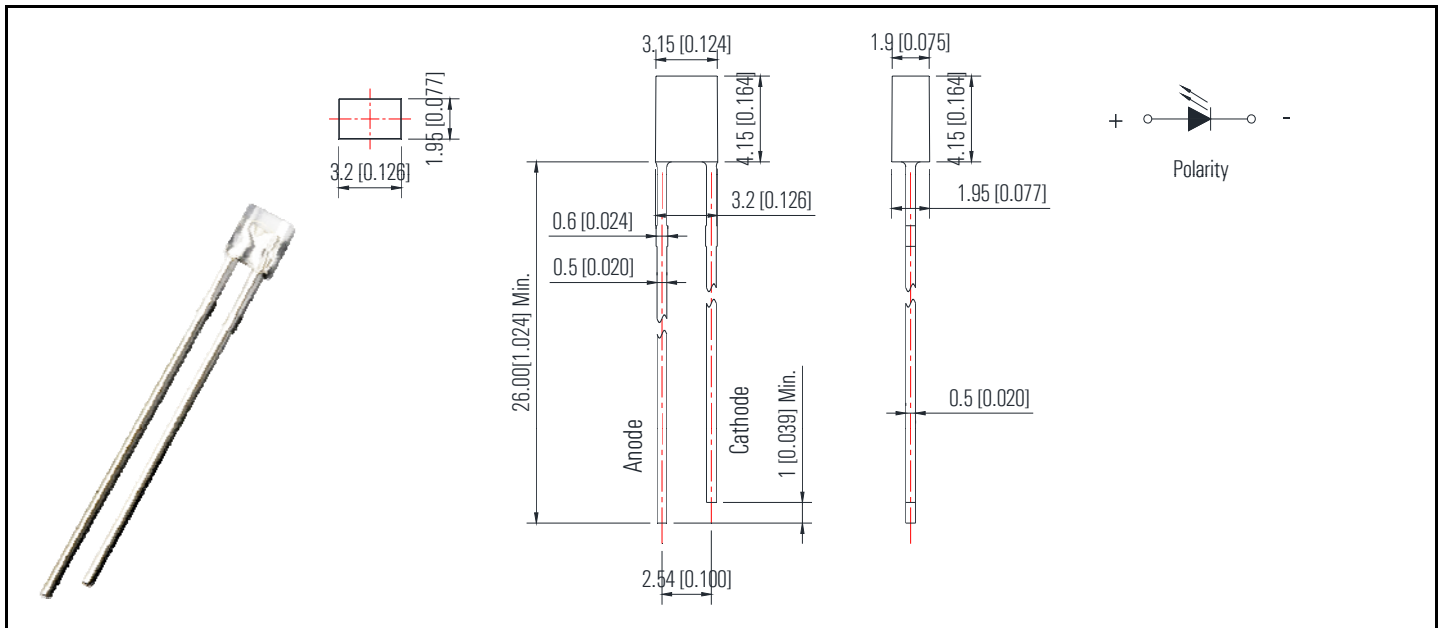
### 2x5mm Rectangular With Flange LED Lamps



253VD1G-1B	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	45	90	130
253AD1G-1B	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		30	70	
253YD1G-1B	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		20	45	
253GD1G-1B	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		9	20	
254PGD1G-G5-2B	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		780	1300	
254BD1G-B4-2B	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		160	270	

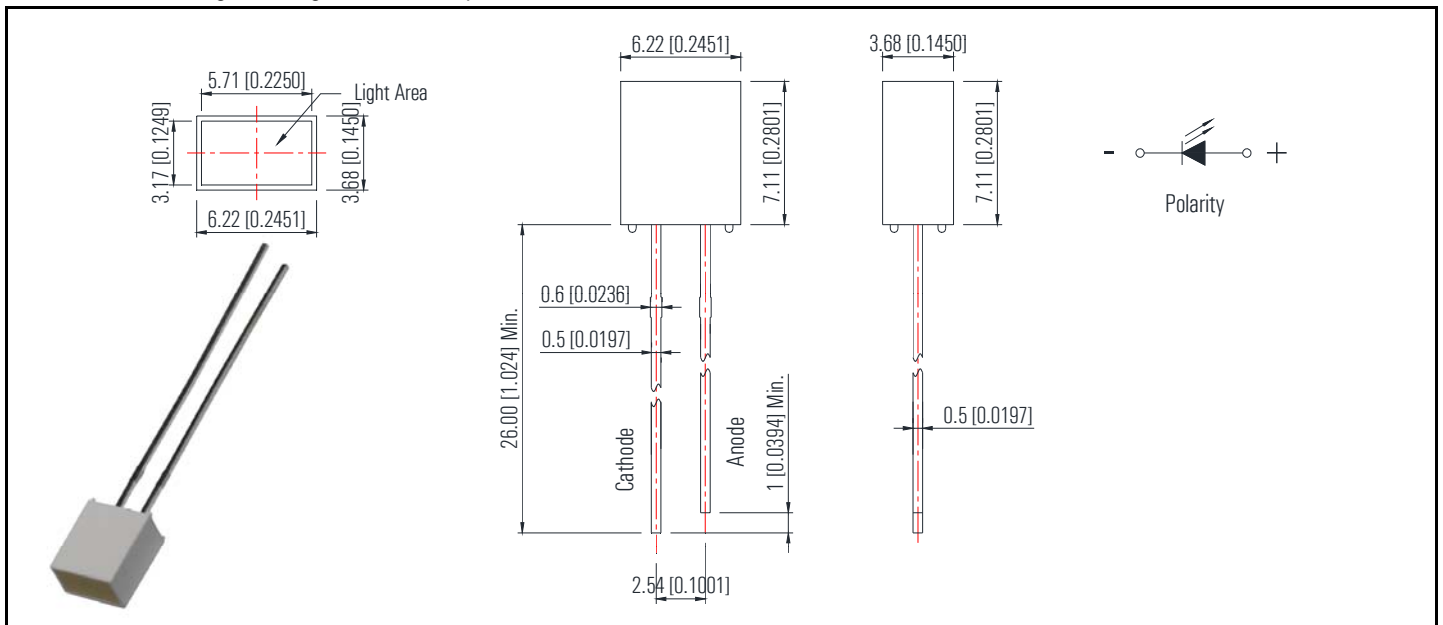
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ ½

### 2x3mm Rectangular Flangeless Super Bright LED Lamps



234VC2Q-2B	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	90	160	130
234AC2Q-2B	AlGaInP	Super Bright Orange	610	605		2.00	2.40		120	210	
234YC2Q-2B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		90	160	
234PGC2Q-G5-2B	InGaN	Pure Green	520	525		3.20	3.60		1700	2900	
234BC2Q-B4-2B	InGaN	Blue	468	470		3.20	3.60		460	780	

### 6.22x3.68mm Rectangular Flangeless LED Lamps

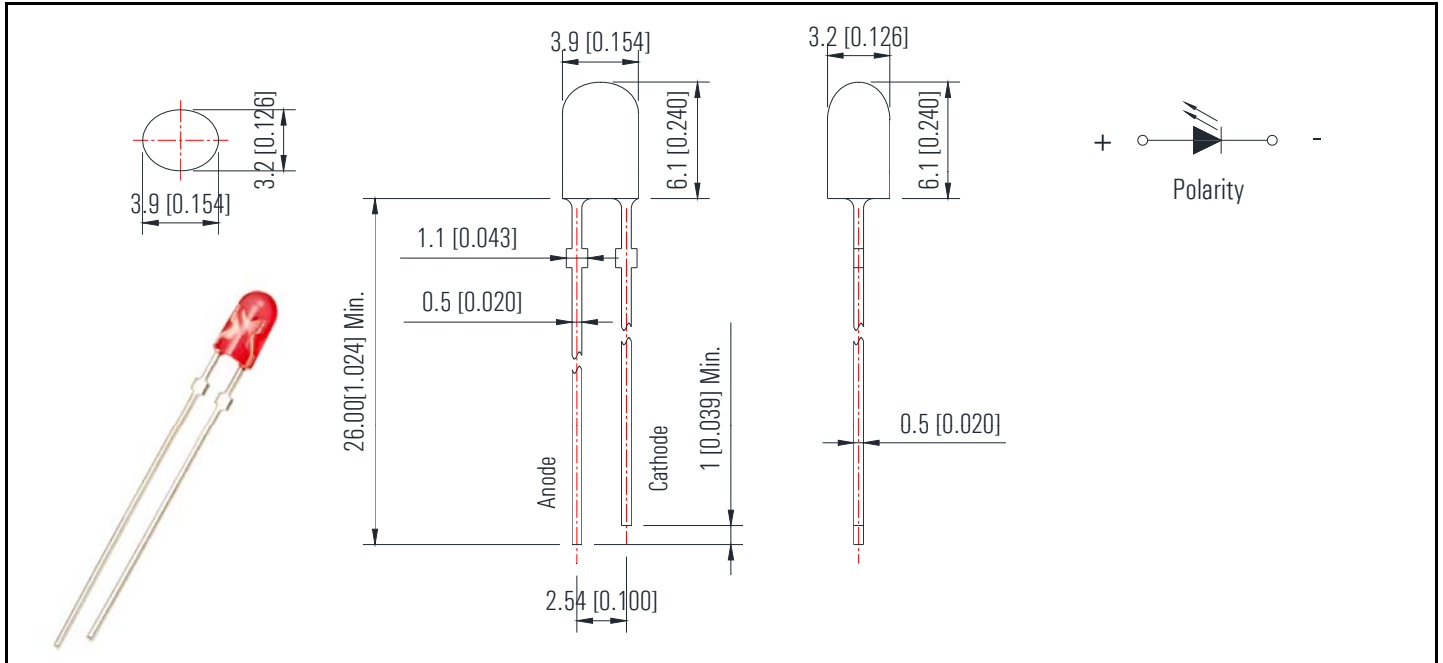


463VDS	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	20	45	110
463YDS	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		20	45	
463GDS	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		5	12	



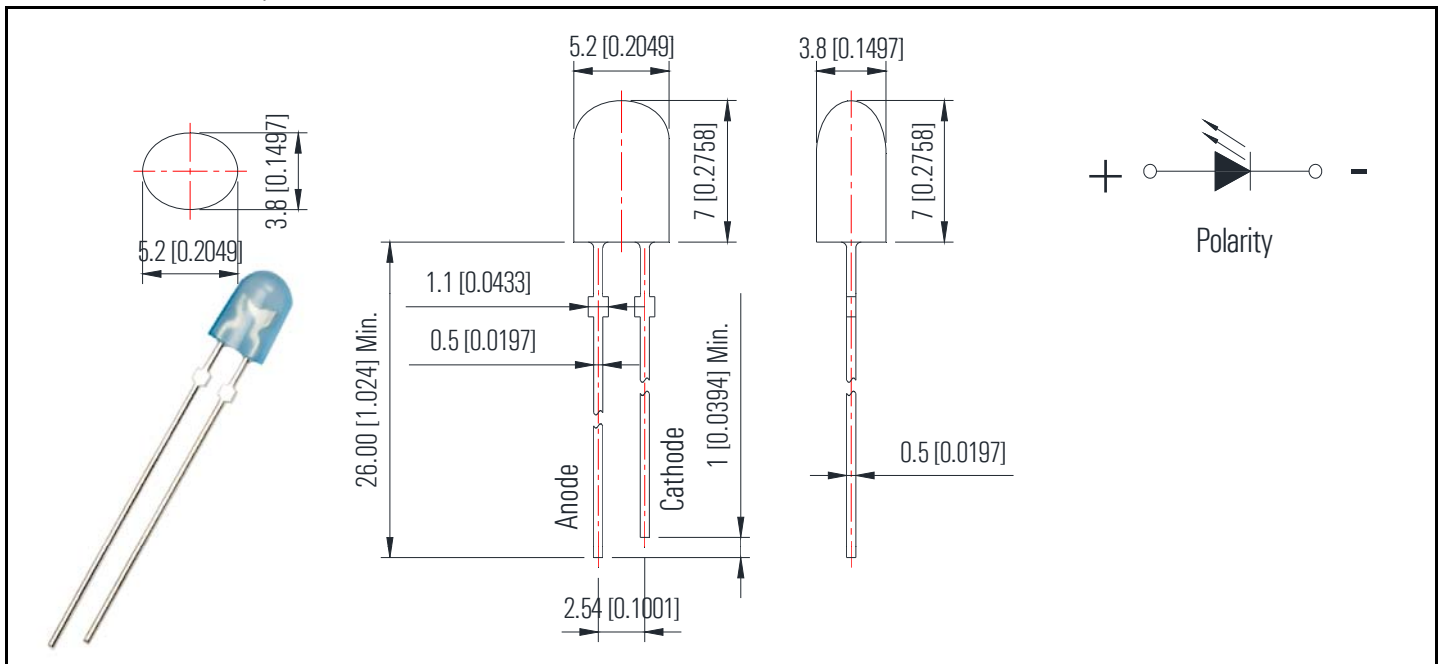
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ ½

### 3.9x3.2mm Oval LED Lamps



434VD2Q-4C-T	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	780	1300	110/40
434YD2Q-4C-T	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		780	1300	
434PGD2Q-G5-2B-T	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		2200	3800	
434BD2Q-B4-2B-T	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		350	600	

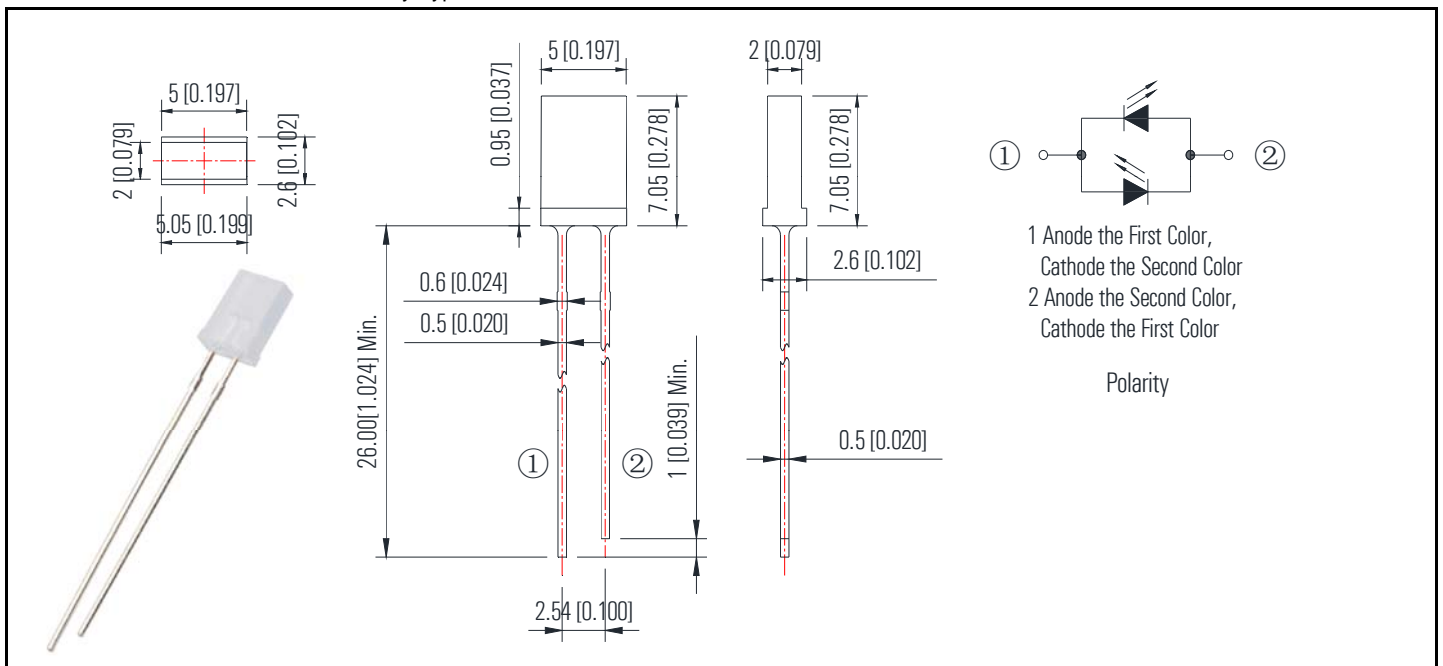
### 5.2x3.8mm Oval LED Lamps



544VD2I-4C-T	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	780	1300	110/40
544YD2I-4C-T	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		600	1000	
544PGD2I-G5-2B-T	InGaN	Pure Green	520	525	Green Diffused	3.20	3.60		1700	2900	
544BD2I-B4-2B-T	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		460	780	

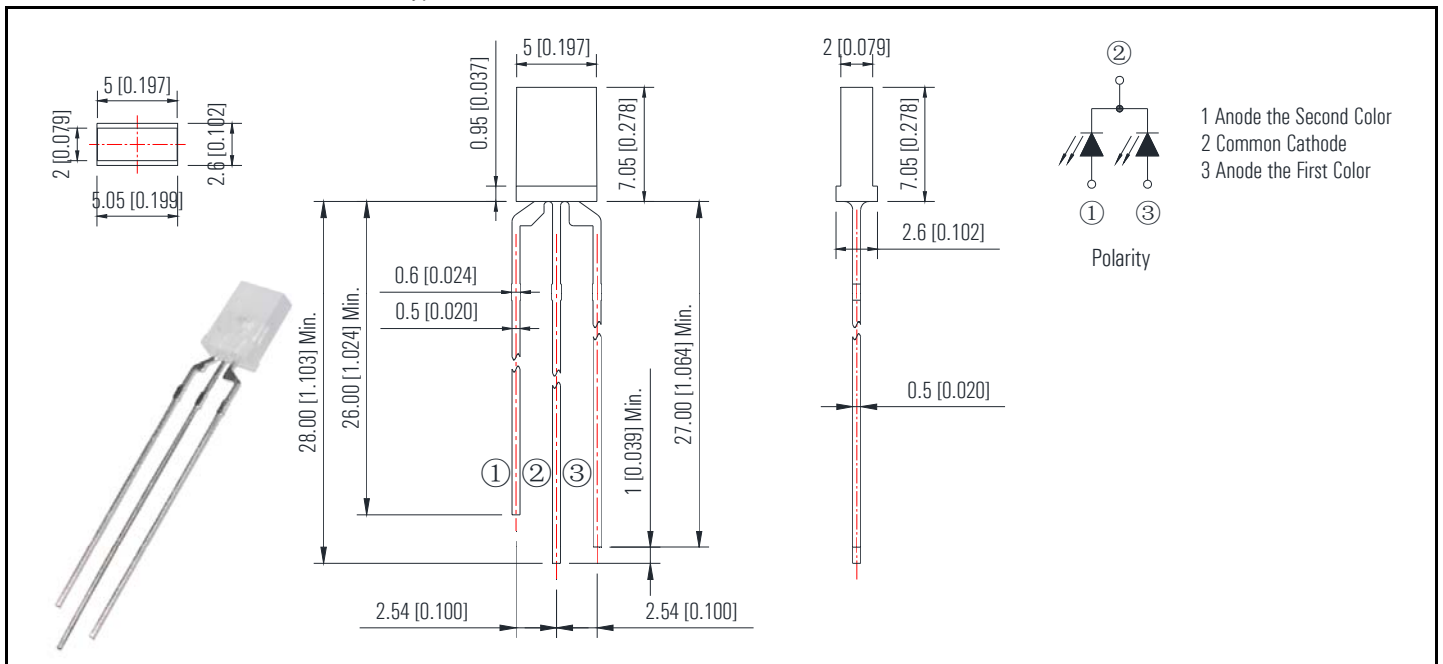
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ 1/2

### 2x5mm Bi-Color Without Common Polarity Type LED



257VGM1G-1B	AlGaInP	Super Bright Red	632	624	White Diffused	2.00	2.40	20	30	70	150
	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		6	13	
257YGM1G-1B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		30	70	
	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		9	20	

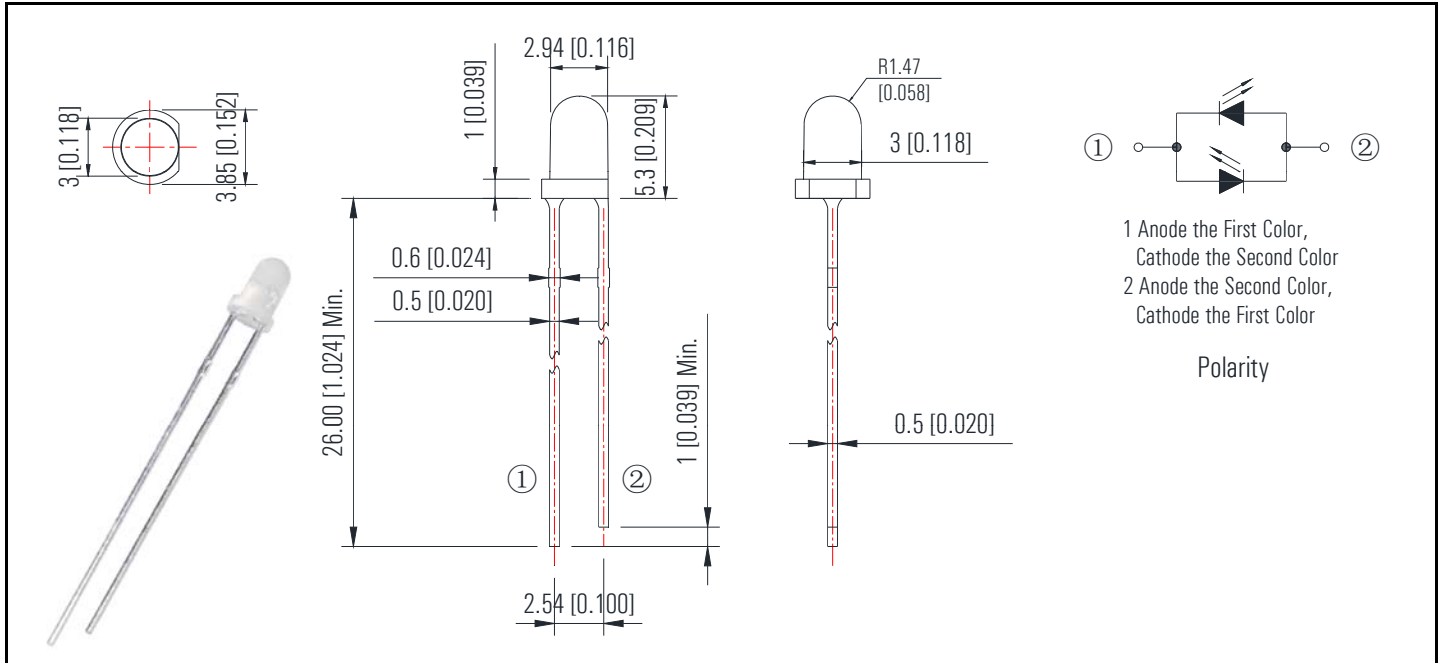
### 2x5mm Bi-Color With Common Cathode Type LED



259VGM1G-C-1B	AlGaInP	Super Bright Red	632	624	White Diffused	2.00	2.40	20	45	90	120
	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		13	30	
259YGM1G-C-1B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		45	90	
	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		13	30	

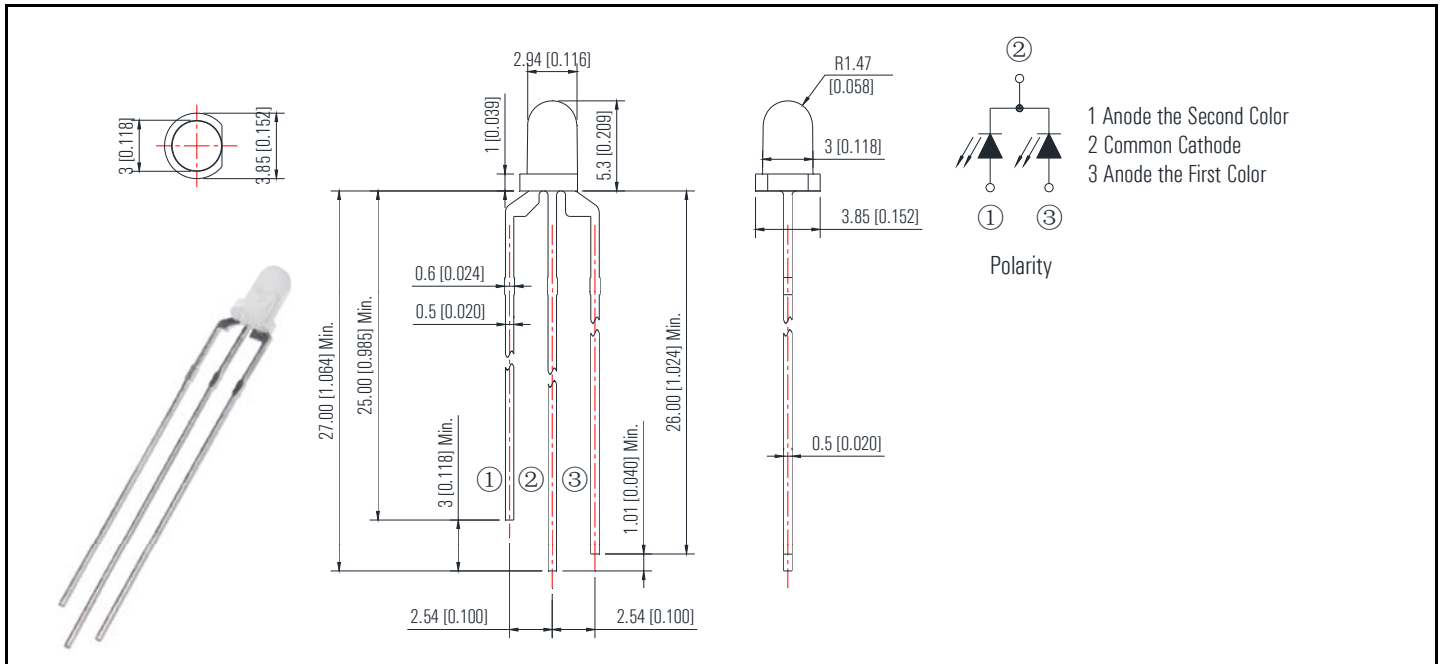
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ 1/2

### 3mm Round Bi-Color Without Common Polarity Type LED



307VGM2E-1B	AlGaInP	Super Bright Red	632	624	White Diffused	2.00	2.40	20	70	170	60
	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		20	45	
307YGM2E-1B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		45	90	
	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		20	45	

### 3mm Round Bi-Color With Common Cathode Type LED

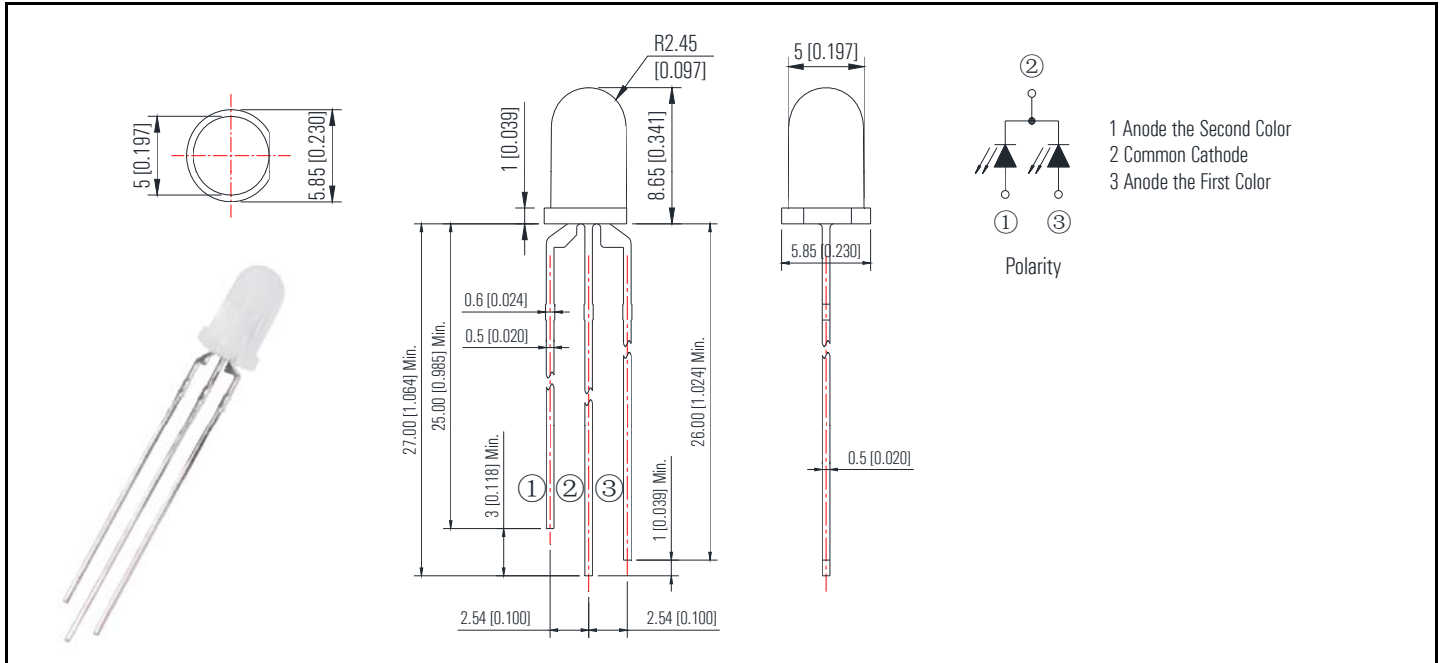


309VGM2E-C-1B	AlGaInP	Super Bright Red	632	624	White Diffused	2.00	2.40	20	110	260	60
	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		45	110	
309YGM2E-C-1B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		70	170	
	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		45	110	



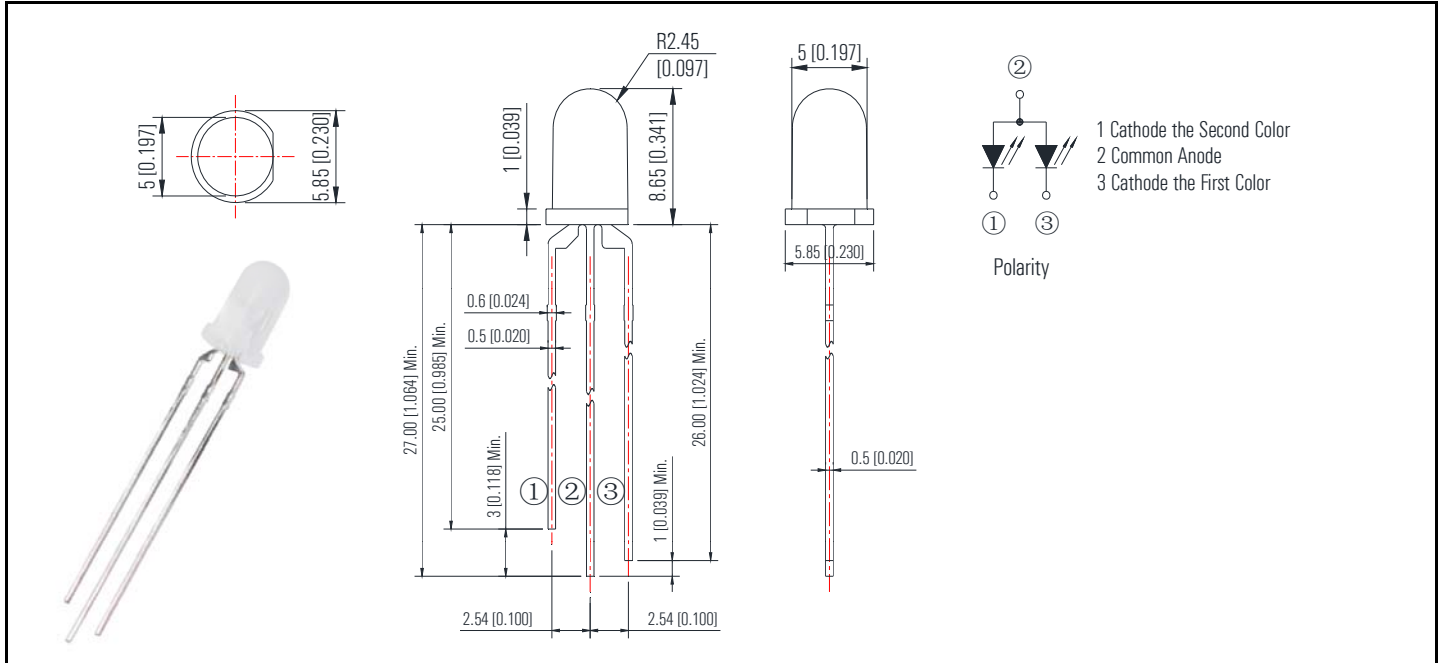
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 5mm Round Bi-Color With Common Cathode Type LED



509VGM2E-C-1B	AlGaInP	Super Bright Red	632	624	White Diffused	2.00	2.40	20	110	260	60
	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		30	70	
509YGM2E-C-1B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		170	390	
	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		45	110	

### 5mm Round Bi-Color With Common Anode Type LED



509VPGM2E-A-3C-G52B	AlGaInP	Super Bright Red	632	624	White Diffused	2.00	2.40	20	390	890	60
	InGaN	Pure Green	520	525		3.20	3.60		1300	3000	
509YPGM2E-A-3C-G52B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		390	890	
	InGaN	Pure Green	520	525		3.20	3.60		1300	3000	

Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ 1/2

### 5mm Round Multi-Color With Common Cathode Type LED

509RGC2E-002	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	1600	3200	25
	InGaN	Pure Green	520	525		3.20	3.60		2000	4000	
	InGaN	Blue	468	470		3.20	3.60		1000	2000	

### 5mm Round Multi-Color With Common Anode Type LED

509RGC2E-004	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	600	1000	25
	InGaN	Pure Green	520	525		3.20	3.60		2000	4000	
	InGaN	Blue	468	470		3.20	3.60		400	700	

Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ 1/2

### 5mm Round Multi-Color With Common Cathode Type LED

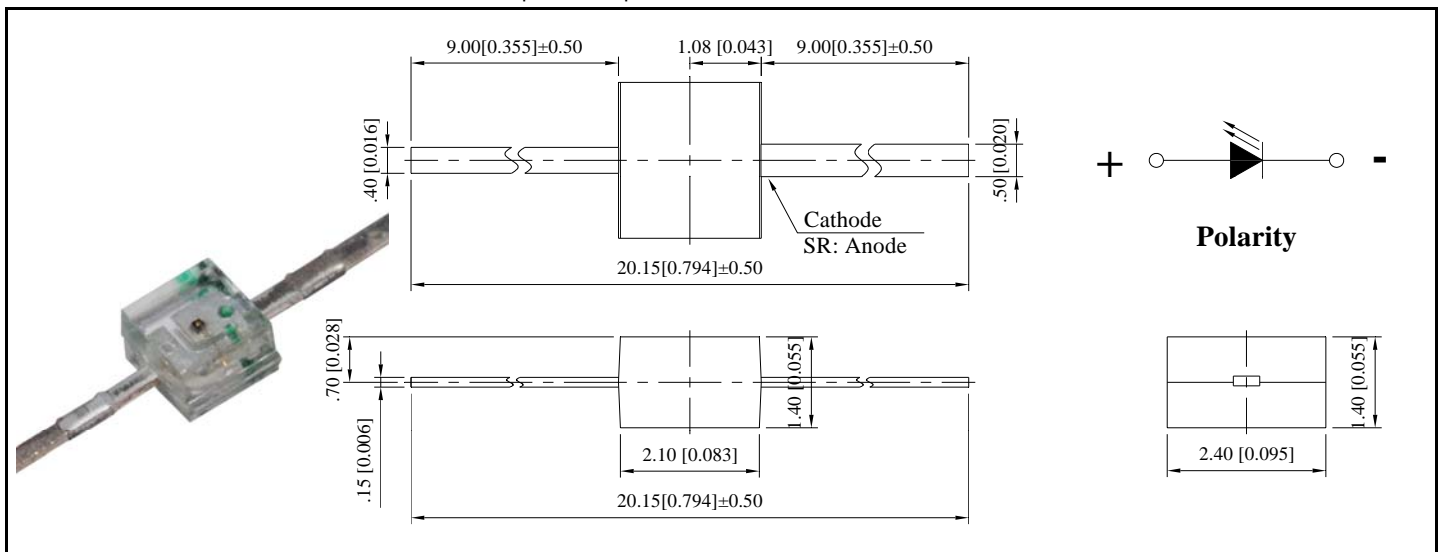
509RGBM2E-002	AlGaInP	Super Bright Red	632	624	White Diffused	2.00	2.40	20	200	500	160
	InGaN	Pure Green	520	525		3.20	3.60		250	1500	
	InGaN	Blue	468	470		3.20	3.60		150	500	

### 5mm Round Multi-Color With Common Anode Type LED

509RGBM2E-004	AlGaInP	Super Bright Red	632	624	White Diffused	2.00	2.40	20	350	600	60
	InGaN	Pure Green	520	525		3.20	3.60		450	1000	
	InGaN	Blue	468	470		3.20	3.60		250	500	

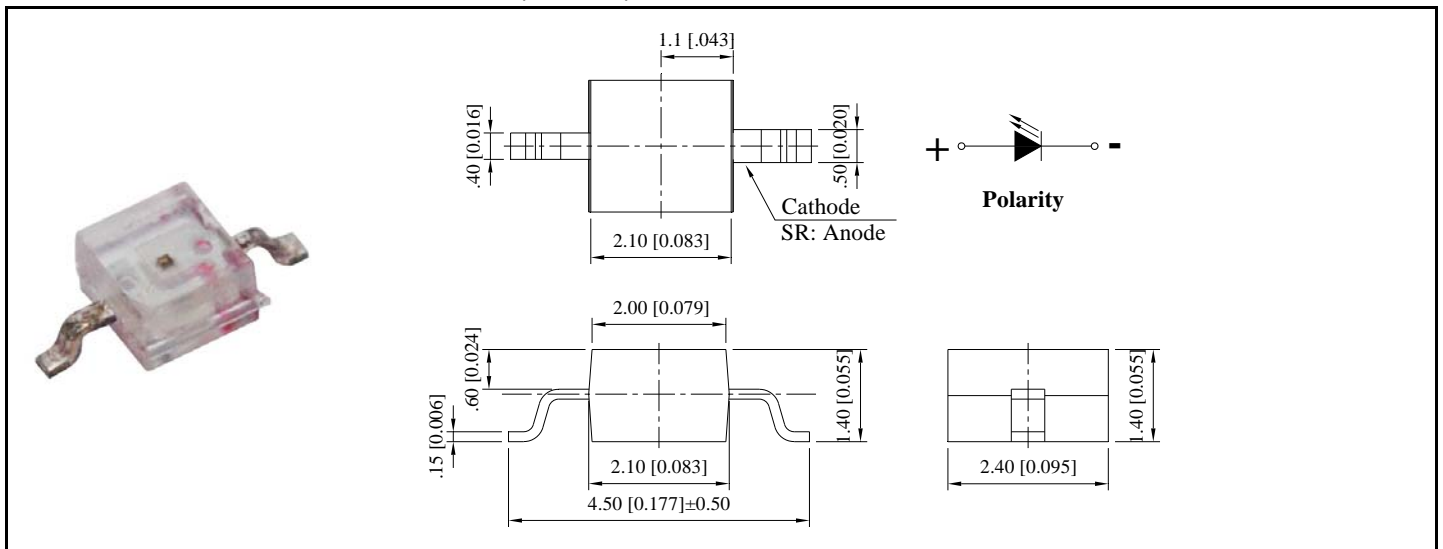
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ ½

2.15mmx2.40mmx1.40mm Subminiature Axial Flat Top View Chip LED



A21VC-2B	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	80	120	140
A21AC-2B	AlGaInP	Super Bright Orange	610	605		2.00	2.40		80	150	
A21YC-2B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		80	120	
A21GC-2B	AlGaInP	Yellow Green	575	573		2.00	2.40		20	40	
A21PGC-G5-1B	InGaN	Pure Green	520	525		3.20	3.60		100	250	
A21BC-B4-1B	InGaN	Blue	468	470		3.20	3.60		45	80	
A21W-W2-1C	InGaN	Cool White	x=0.31	y=0.32		Yellow Diffused	3.20		3.60	150	

2.15mmx2.40mmx1.40mm Subminiature Axial Flat Top View Chip LED

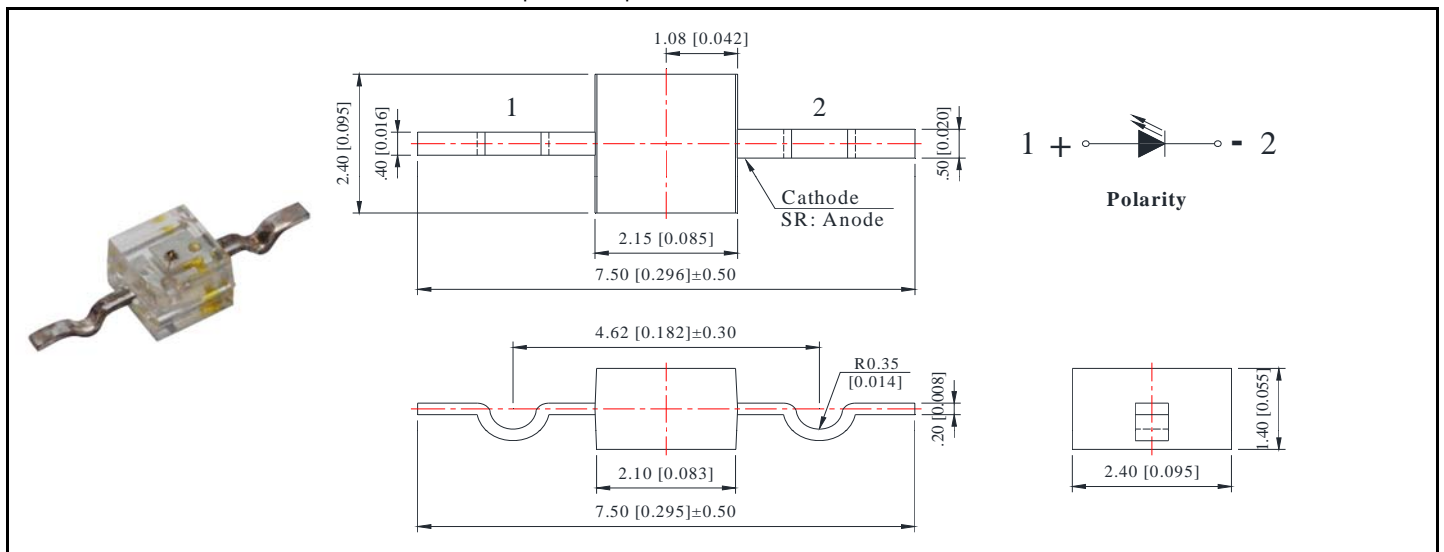


A21VC-2B/TR3	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	80	120	140
A21AC-2B/TR3	AlGaInP	Super Bright Orange	610	605		2.00	2.40		80	150	
A21YC-2B/TR3	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		80	120	
A21GC-2B/TR3	AlGaInP	Yellow Green	575	573		2.00	2.40		20	40	
A21PGC-G5-1B/TR3	InGaN	Pure Green	520	525		3.20	3.60		100	250	
A21BC-B4-1B/TR3	InGaN	Blue	468	470		3.20	3.60		45	80	
A21W-W2-1C/TR3	InGaN	Cool White	x=0.31	y=0.32		Yellow Diffused	3.20		3.60	150	



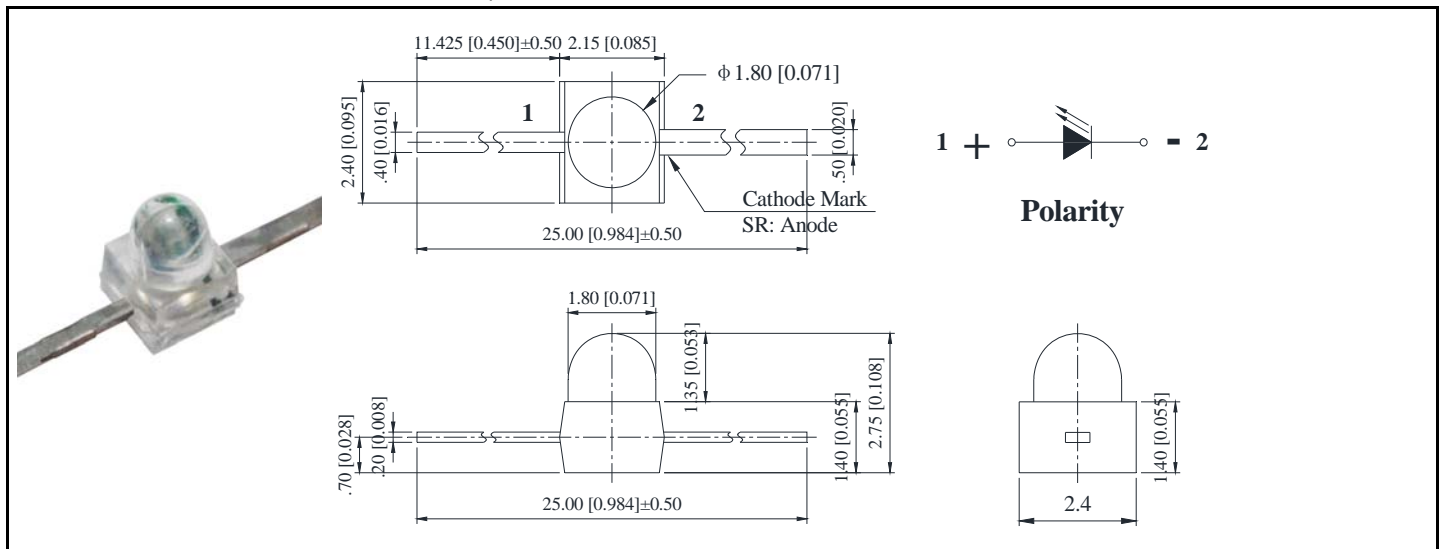
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ 1/2

2.15mmx2.40mmx1.40mm Subminiature Axial Flat Top View Chip LED



A21VC-2B/TR6	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	80	120	140
A21AC-2B/TR6	AlGaInP	Super Bright Orange	610	605		2.00	2.40		80	150	
A21YC-2B/TR6	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		80	120	
A21GC-2B/TR6	AlGaInP	Yellow Green	575	573		2.00	2.40		20	40	
A21PGC-G5-1B/TR6	InGaN	Pure Green	520	525		3.20	3.60		100	250	
A21BC-B4-1B/TR6	InGaN	Blue	468	470		3.20	3.60		45	80	
A21W-W2-1C/TR6	InGaN	Cool White	x=0.31	y=0.32	Yellow Diffused	3.20	3.60	150	300		


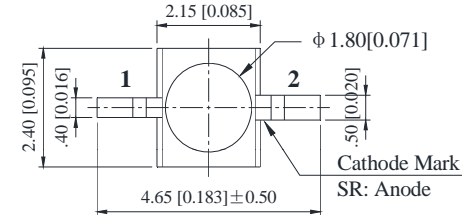
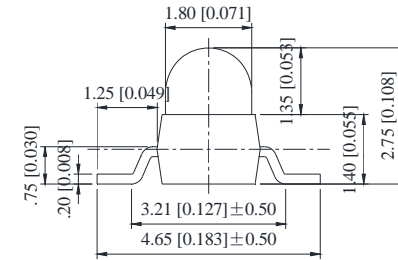
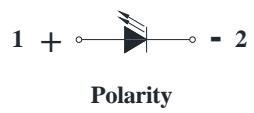
2.15mmx2.40mmx2.75mm Subminiature Axial Chip LED



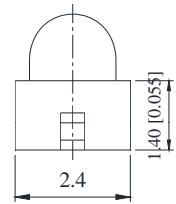
AR180VC-2B	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	1000	2000	25
AR180AC-2B	AlGaInP	Super Bright Orange	610	605		2.00	2.40		800	1800	
AR180YC-2B	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		1000	2000	
AR180GC-2B	AlGaInP	Yellow Green	575	573		2.00	2.40		800	1800	
AR180PGC-G5-1B	InGaN	Pure Green	520	525		3.20	3.60		1500	3000	
AR180BC-B4-1B	InGaN	Blue	468	470		3.20	3.60		500	1000	
AR180W-W2-1C	InGaN	Cool White	x=0.31	y=0.32	Yellow Diffused	3.20	3.60	150	500	160	

Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 2.15mmx2.40mmx2.75mm Subminiature Axial Chip LED


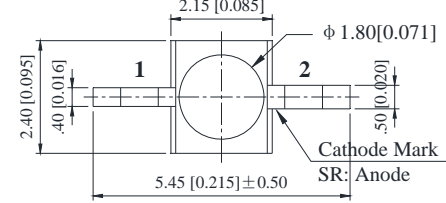
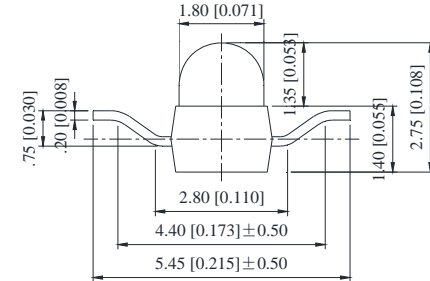






**Polarity**

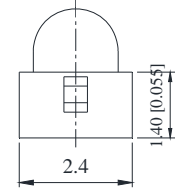


AR180VC-2B/TR2	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	1000	2000	25
AR180AC-2B/TR2	AlGaInP	Super Bright Orange	610	605		2.00	2.40		800	1800	
AR180YC-2B/TR2	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		1000	2000	
AR180GC-2B/TR2	AlGaInP	Yellow Green	575	573		2.00	2.40		800	1800	
AR180PGC-G5-1B/TR2	InGaN	Pure Green	520	525		3.20	3.60		1500	3000	
AR180BC-B4-1B/TR2	InGaN	Blue	468	470		3.20	3.60		500	1000	
AR180W-W2-1C/TR2	InGaN	Cool White	x=0.31	y=0.32	Yellow Diffused	3.20	3.60	150	500	160	

### 2.15mmx2.40mmx2.75mm Subminiature Axial Chip LED


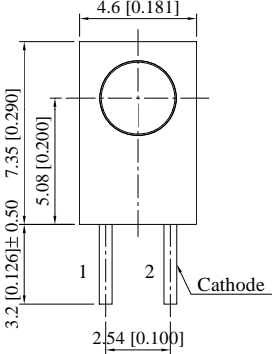
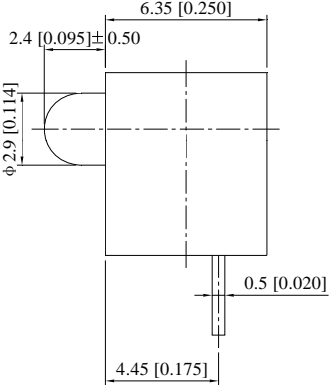

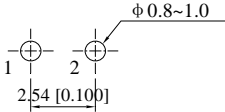
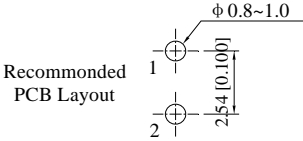
**Polarity**



AR180VC-2B/TR5	AlGaInP	Super Bright Red	632	624	Water Clear	2.00	2.40	20	1000	2000	25
AR180AC-2B/TR5	AlGaInP	Super Bright Orange	610	605		2.00	2.40		800	1800	
AR180YC-2B/TR5	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		1000	2000	
AR180GC-2B/TR5	AlGaInP	Yellow Green	575	573		2.00	2.40		800	1800	
AR180PGC-G5-1B/TR5	InGaN	Pure Green	520	525		3.20	3.60		1500	3000	
AR180BC-B4-1B/TR5	InGaN	Blue	468	470		3.20	3.60		500	1000	
AR180W-W2-1C/TR5	InGaN	Cool White	x=0.31	y=0.32	Yellow Diffused	3.20	3.60	150	500	160	


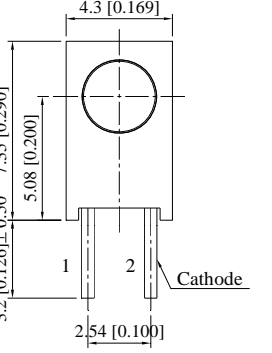
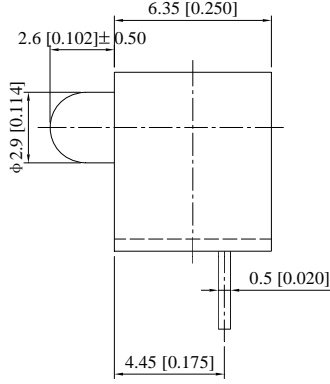

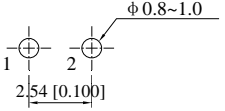
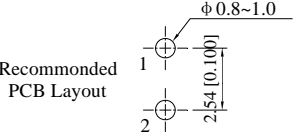
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 3mm Circuit Board Indicator / Single Level CBI

H30C-1VD	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	160	270	80
H30C-1AD	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		90	160	
H30C-1YD	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		90	160	
H30C-1GD	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		90	160	
H30C-1BD	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		460	780	60

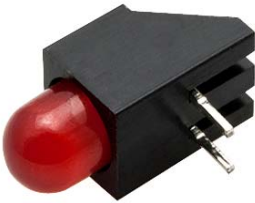
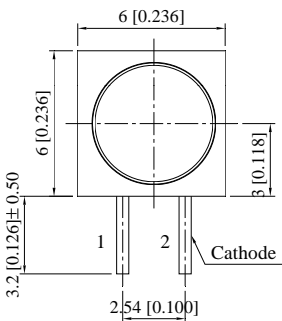
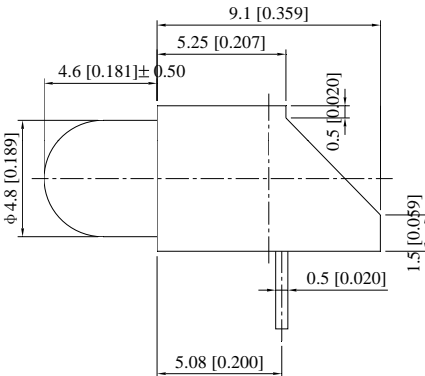

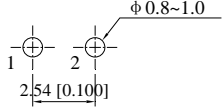
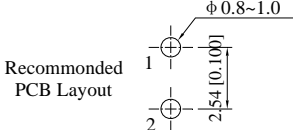
### 3mm Circuit Board Indicator / Single Level CBI

H30E-1VD	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	160	270	80
H30E-1AD	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		90	160	
H30E-1YD	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		90	160	
H30E-1GD	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		90	160	
H30E-1BD	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		460	780	60


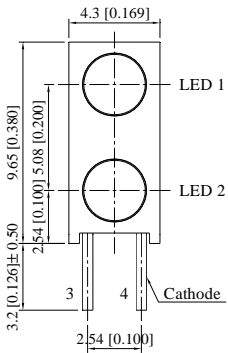
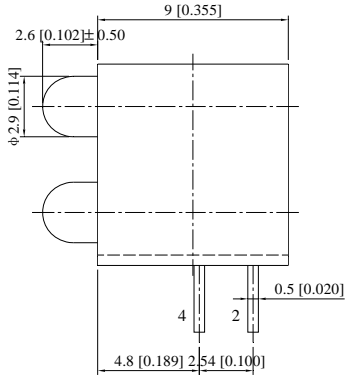
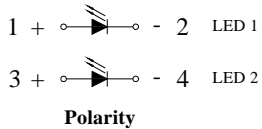
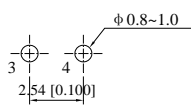
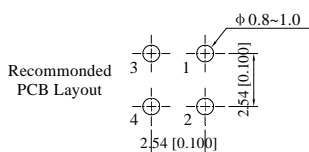
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 5mm Circuit Board Indicator / Single Level CBI

H50C-1VD	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	160	270	60
H50C-1AD	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		70	120	
H50C-1YD	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		120	210	
H50C-1GD	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		20	45	
H50C-1BD	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		350	600	

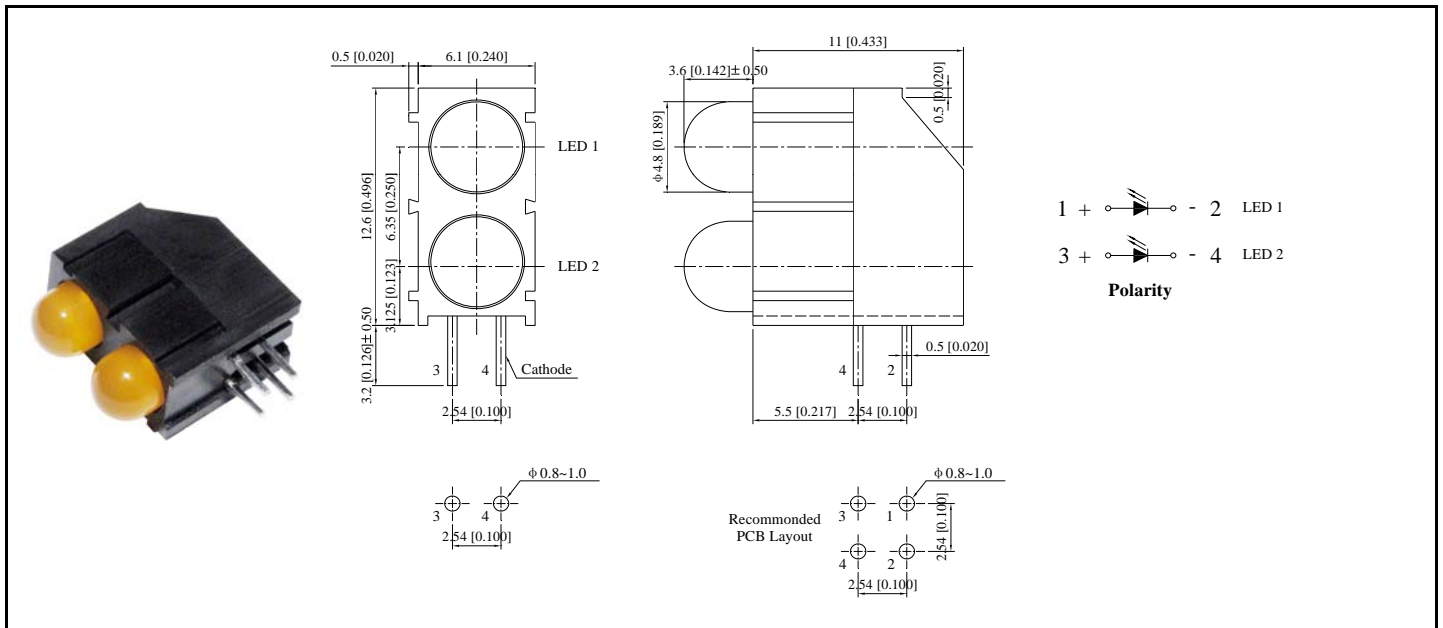
### 3mm Circuit Board Indicator / Bi-Level CBI

H30F-2VD-RS	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	160	270	80
H30F-2AD-RS	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		90	160	
H30F-2YD-RS	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		90	160	
H30F-2GD-RS	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		90	160	
H30F-2BD-RS	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		460	780	

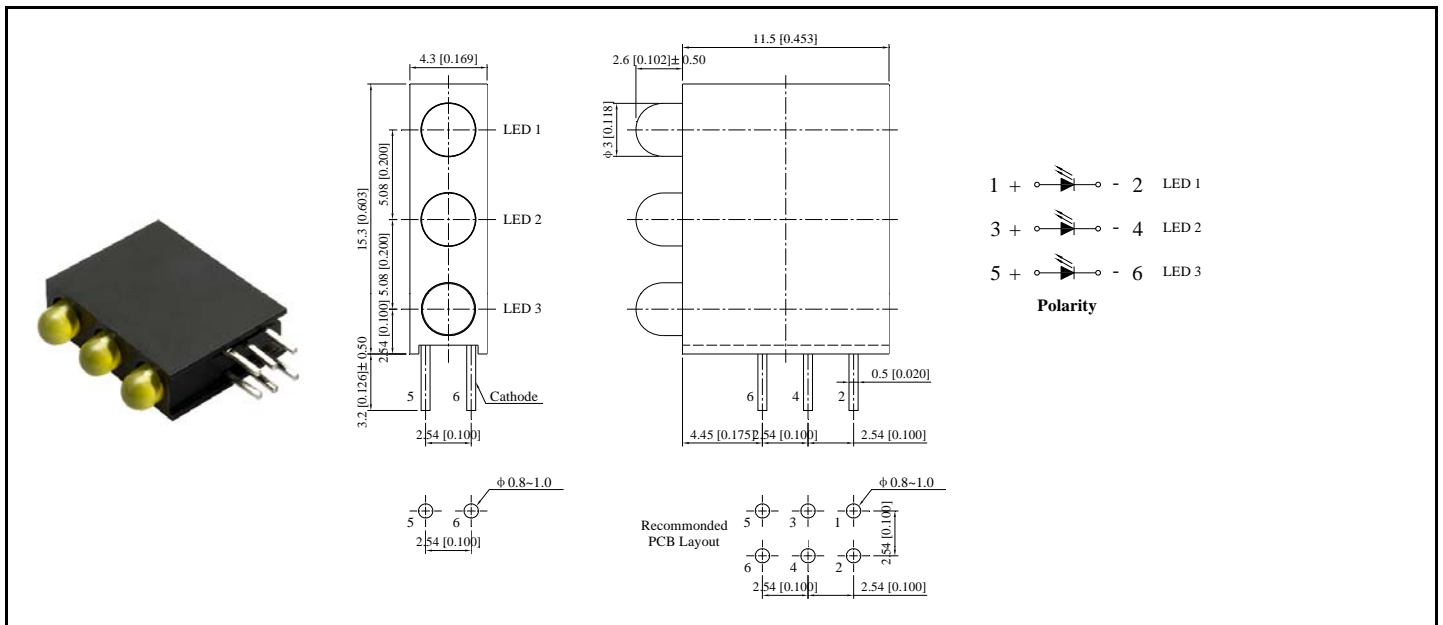
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 5mm Circuit Board Indicator / Bi-Level CBI



H50F-2VD	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	210	350	60
H50F-2AD	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		90	160	
H50F-2YD	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		210	350	
H50F-2GD	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		70	120	
H50F-2BD	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		350	600	

### 3mm Circuit Board Indicator / Tri-Level CBI



H30D-3VD-RS	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	160	270	80
H30D-3AD-RS	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		90	160	
H30D-3YD-RS	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		90	160	
H30D-3GD-RS	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		90	160	
H30D-3BD-RS	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		460	780	

Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 3mm Circuit Board Indicator / Quad-Level CBI

Technical drawings for the 3mm Circuit Board Indicator. The top view shows four LEDs (LED 1 to LED 4) arranged in a vertical line. The cathode pins are labeled 7 and 8. Dimensions include a total height of 20.32 [0.801], LED pitch of 5.08 [0.200], and LED diameter of 4.45 [0.175]. The side view shows a package height of 3.5 [0.138] ± 0.50 and a pin pitch of 2.54 [0.100]. A recommended PCB layout shows a 5.7 [0.225] wide pad for the cathode pins.

Pinout and Polarity:

- 1 + - 2 LED 1
- 3 + - 4 LED 2
- 5 + - 6 LED 3
- 7 + - 8 LED 4

**Polarity**

H30D-4VD-RS	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	160	270	80
H30D-4AD-RS	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		90	160	
H30D-4YD-RS	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		90	160	
H30D-4GD-RS	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		90	160	
H30D-4BD-RS	InGaN	Blue	468	470	Blue Diffused	3.20	3.60		460	780	60

### 2x3mm Rectangular LED Circuit Board Indicator / Quad-Level Right Angle CBI

Technical drawings for the 2x3mm Rectangular LED Circuit Board Indicator. The top view shows four LEDs (LED 1 to LED 4) arranged in a vertical line. The cathode pins are labeled 7 and 8. Dimensions include a total height of 12 [0.473], LED pitch of 2.50 [0.098] ± 0.25, and LED width of 5.1 [0.201]. The side view shows a package height of 2.3 [0.091] ± 0.50 and a pin pitch of 2.54 [0.100]. A recommended PCB layout shows a 2.54 [0.100] wide pad for the cathode pins.

Pinout and Polarity:

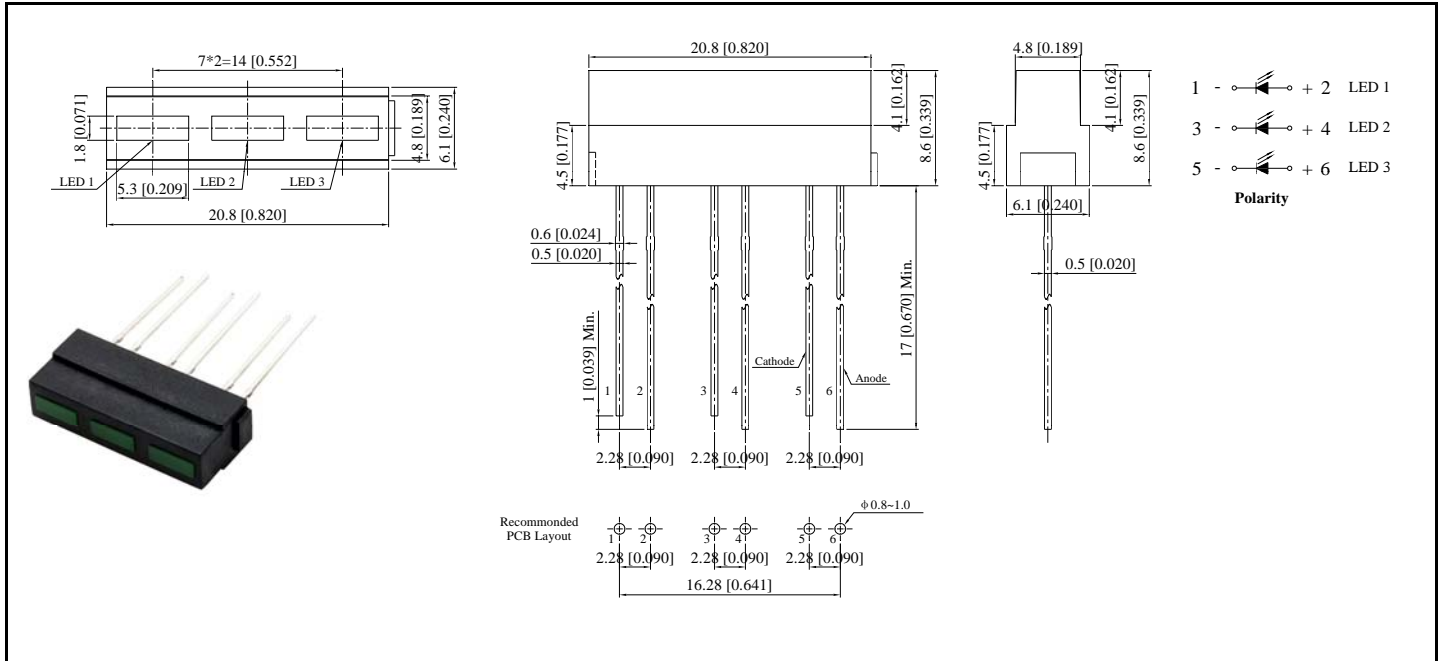
- 1 + - 2 LED 1
- 3 + - 4 LED 2
- 5 + - 6 LED 3
- 7 + - 8 LED 4

**Polarity**

H23K-4VD	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	70	120	130
H23K-4AD	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		45	90	
H23K-4YD	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		30	70	
H23K-4GD	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		20	45	

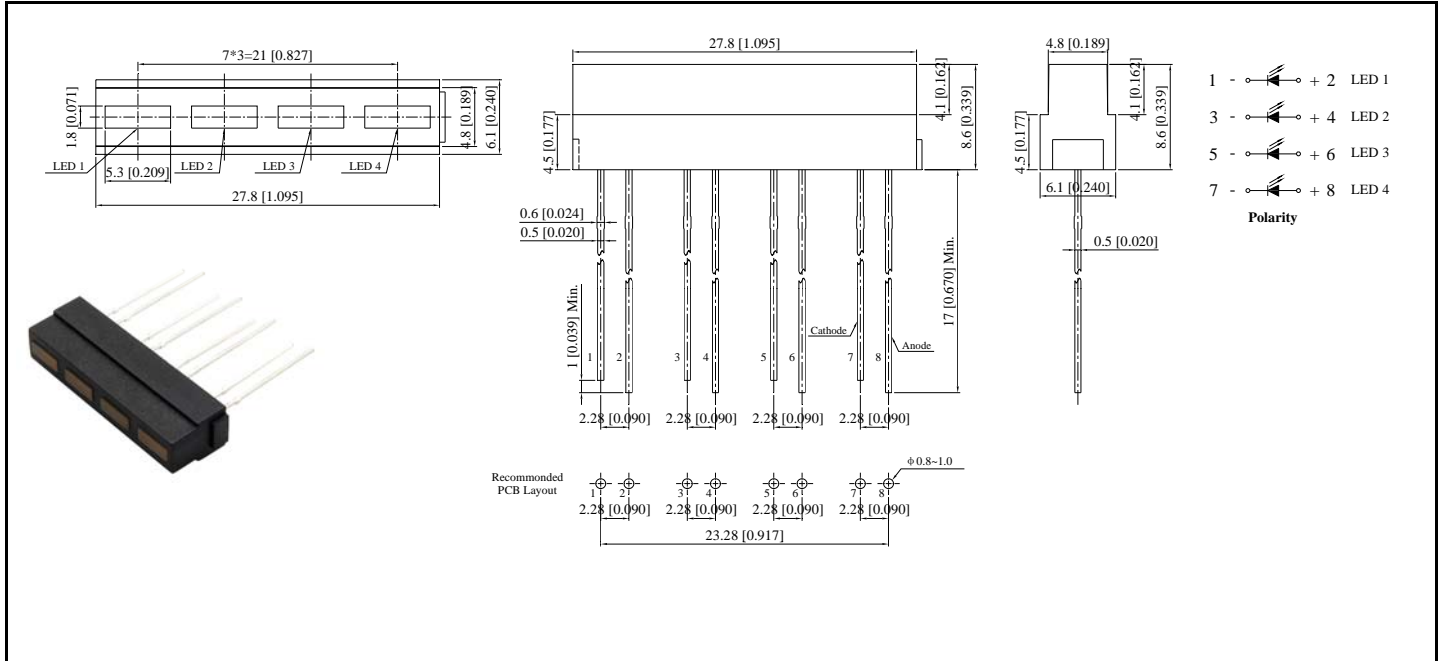
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

### 2x5mm Rectangular LED Circuit Board Indicator / Tri-Block CBI



H23CB-3VD	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	9	20	180
H23CB-3AD	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		13	30	
H23CB-3YD	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		9	20	
H23CB-3GD	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		1	3	

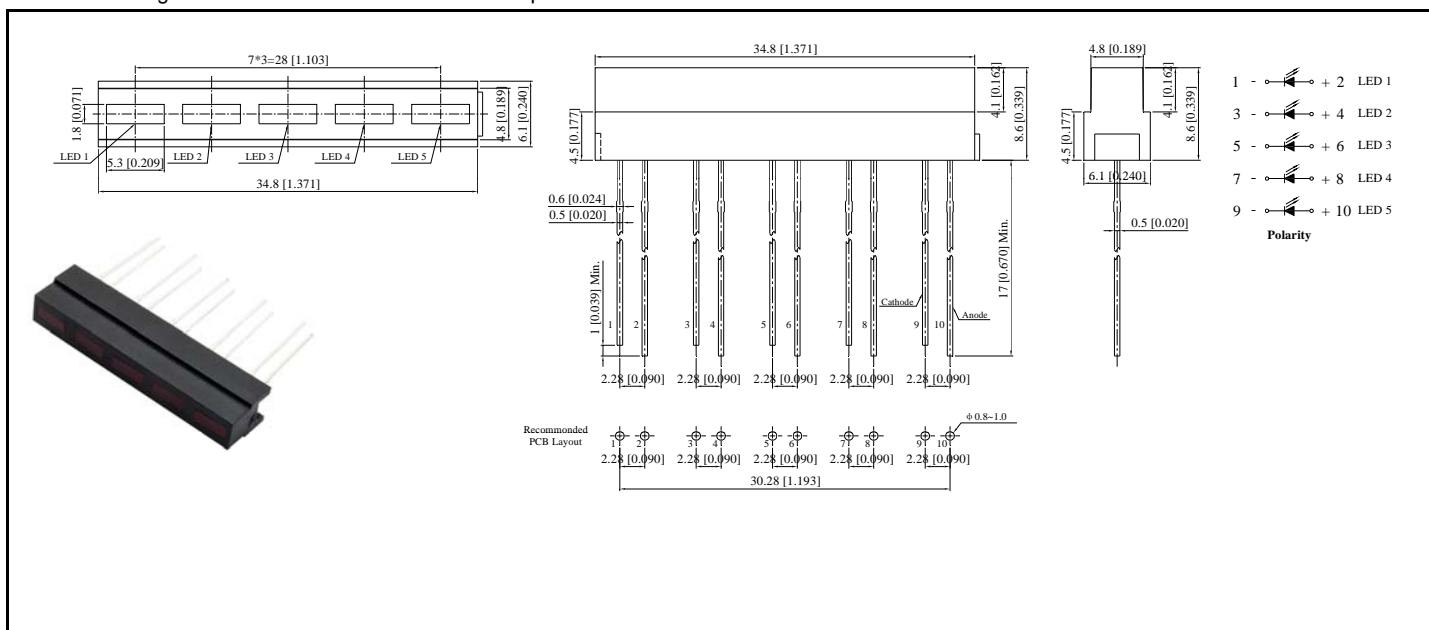
### 2x5mm Rectangular LED Circuit Board Indicator / Multiple Block CBI



H23CB-4VD	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	9	20	180
H23CB-4AD	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		13	30	
H23CB-4YD	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		9	20	
H23CB-4GD	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		1	3	

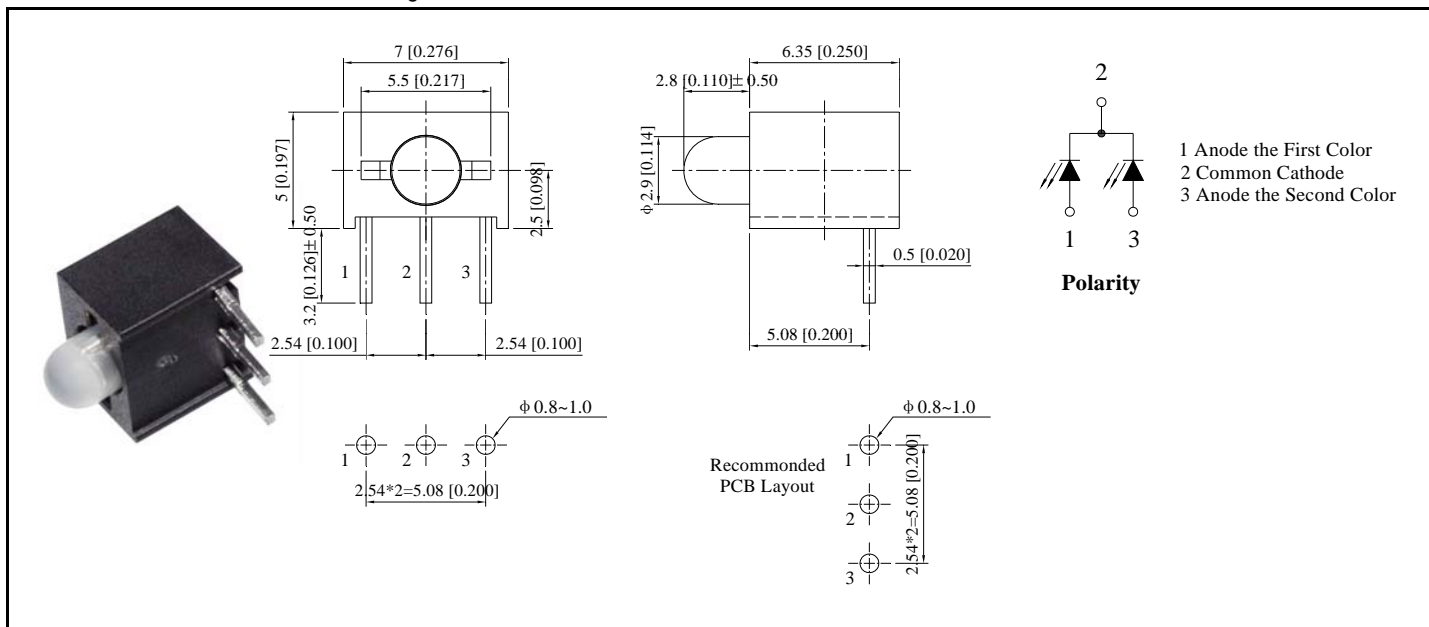
Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2θ 1/2

### 2x5mm Rectangular LED Circuit Board Indicator / Multiple Block CBI



H23CB-5VD	AlGaInP	Super Bright Red	632	624	Red Diffused	2.00	2.40	20	9	20	180
H23CB-5AD	AlGaInP	Super Bright Orange	610	605	Orange Diffused	2.00	2.40		13	30	
H23CB-5YD	AlGaInP	Super Bright Yellow	592	590	Yellow Diffused	2.00	2.40		9	20	
H23CB-5GD	AlGaInP/GaAs	Super Yellow Green	573	571	Green Diffused	2.00	2.40		1	3	

### 3mm Bi-Color Circuit Board Indicator / Single Level CBI

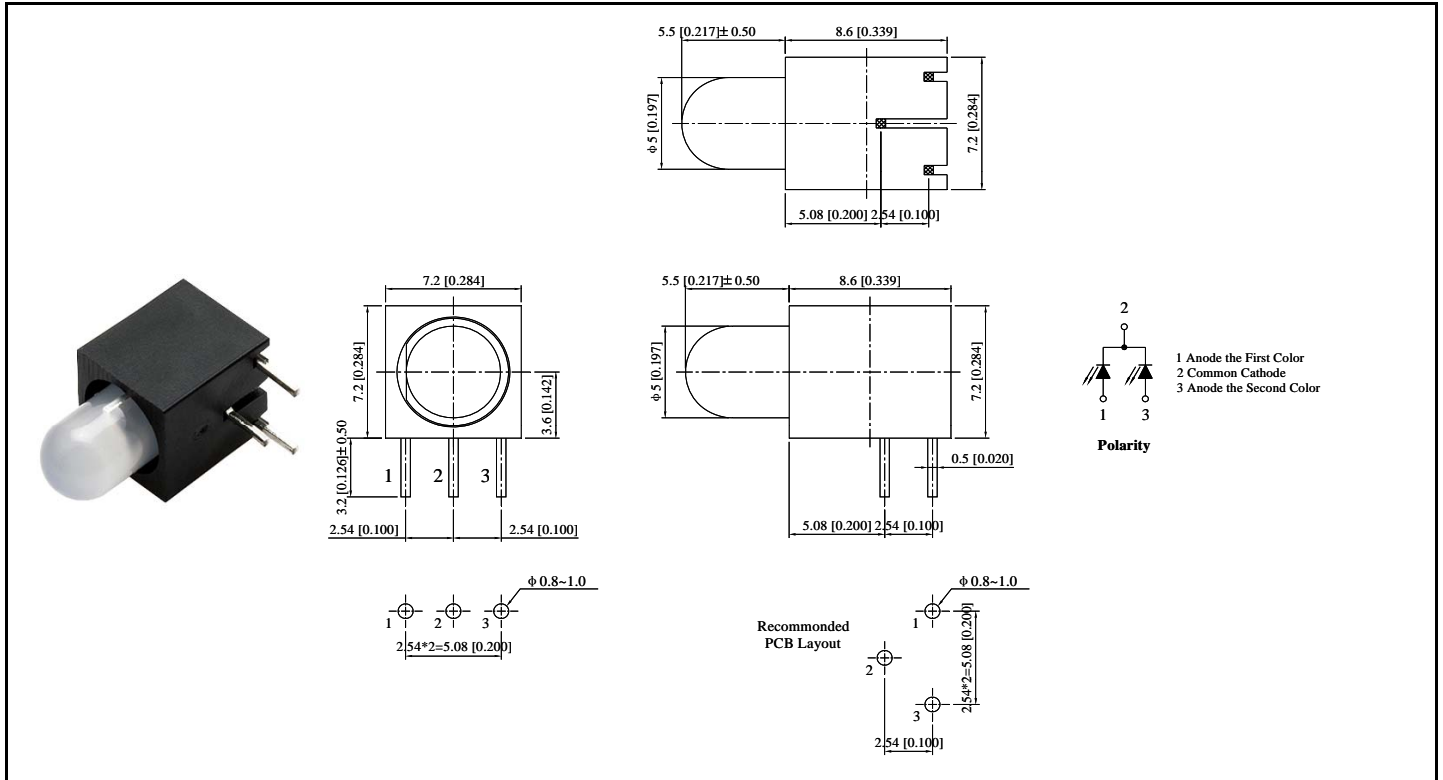


H30WD-1VGM	AlGaInP	Super Bright Red	632	624	White Diffused	2.00	2.40	20	110	260	80
	AlGaInP/GaAs	Super Yellow Green	573	571		45	110				
H30WD-1VYM	AlGaInP	Super Bright Red	632	624		2.00	2.40		70	170	
	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		45	110	
H30WD-1GYM	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		30	70	
	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		70	170	



Part Number	Chip Material	Emitting Color	$\lambda_p$ (nm) / x	$\lambda_d$ (nm) / y	Lens Color	VF (V)		IV (mcd)			Viewing Angle
						Typ.	Max.	IF=mA	Min.	Typ.	2 $\theta$ 1/2

5mm Bi-Color Circuit Board Indicator / Single Level CBI



H50E-1VGM	AlGaInP	Super Bright Red	632	624	White Diffused	2.00	2.40	20	110	260	60
	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		30	70	
H50E-1VYM	AlGaInP	Super Bright Red	632	624		2.00	2.40		110	260	
	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		110	260	
H50E-1GYM	AlGaInP/GaAs	Super Yellow Green	573	571		2.00	2.40		45	110	
	AlGaInP	Super Bright Yellow	592	590		2.00	2.40		170	390	

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25$ mm (.010") unless otherwise noted.
3. Specifications are subject to change without notice.