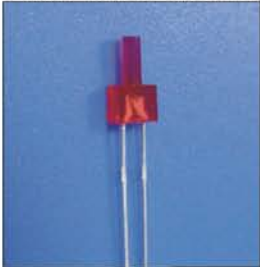
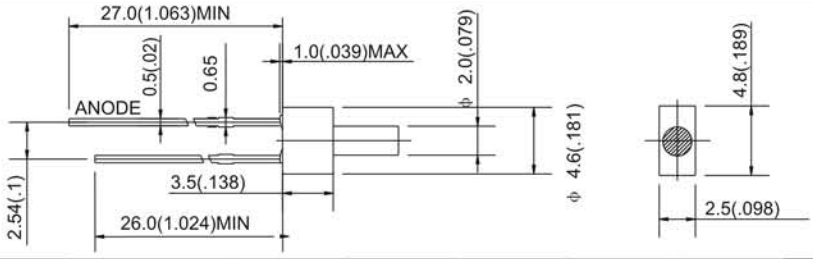



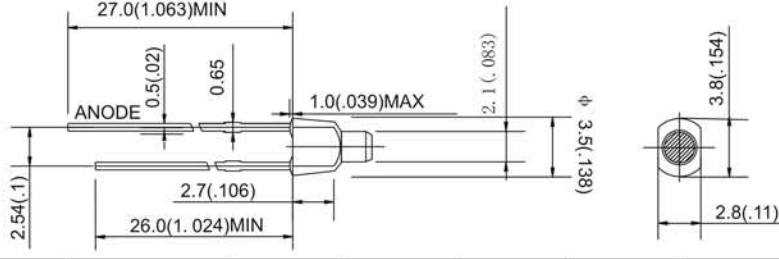
Part Number LL-XXXX	Chip			Lens Color	Vf(V)		Iv (mcd)			Viewing Angle 2θ 1/2
	Material	Emitted Color	W/L (nm)		Typ	Max	IF=mA	Min	Typ	

2mm Tower Typ LEDs


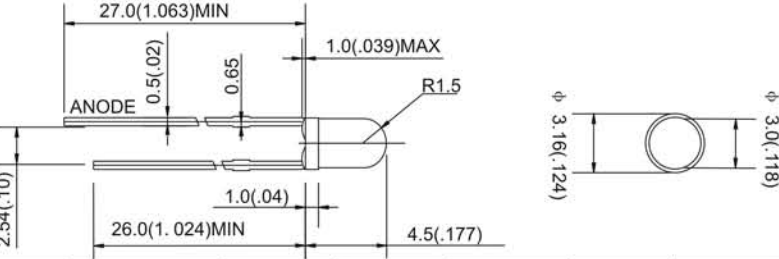
204SD1F	GaAlAs	Super Red	640	Color Diffused	1.8	2.4	10	3.0	8.0	100
204GD1F	GaP	Yellow Green	570		2.2	2.6		1.0	3.0	
204YD1F	GaAsP/GaP	Yellow	590		2.2	2.6		1.0	3.0	

2mm Tower Typ LEDs

204SD2L	GaAlAs	Super Red	640	Color Diffused	1.8	2.4	10	6.0	12.0	150
204GD2L	GaP	Yellow Green	570		2.2	2.6		6.0	12.0	
204YD2L	GaAsP/GaP	Yellow	590		2.2	2.6		6.0	12.0	

3mm Round Small Flange without Stand-Off LED, T-1

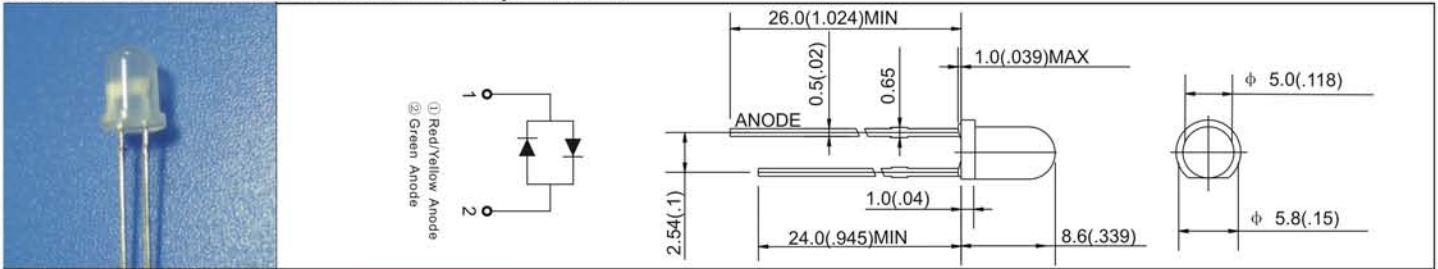



304HD2P	GaP	Red	700	Color Diffused	2.2	2.6	10	1.0	3.0	60
304GD2P	GaP	Yellow Green	570		2.2	2.6		6.0	18.0	
304YD2P	GaAsP/GaP	Yellow	590		2.2	2.6		6.0	15.0	

1. All dimensions are in millimeters(inches)  
 2. Tolerance is ±0.25mm(0.01" ) unless otherwise noted

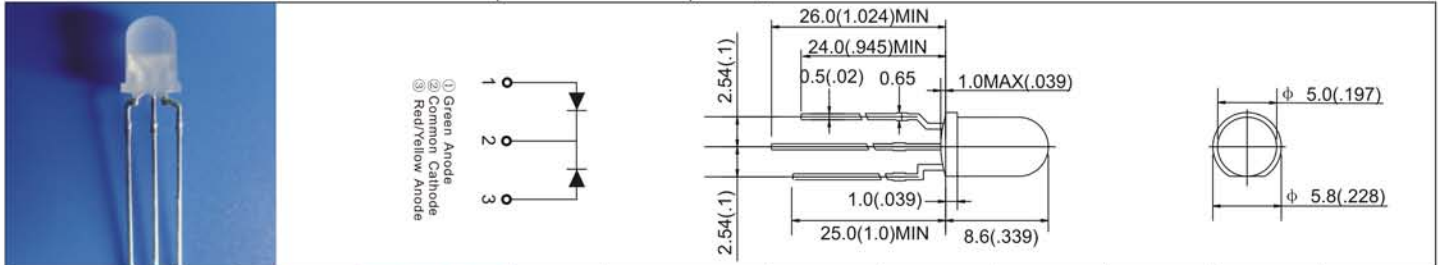
Part Number LL-XXXX	Chip			Lens Color	Vf(V)		Iv (mcd)			Viewing Angle 2θ 1/2
	Material	Emitted Color	W/L (nm)		Typ	Max	IF=mA	Min	Typ	

5mm Bi-Color Without Common Polarity LED, T-1



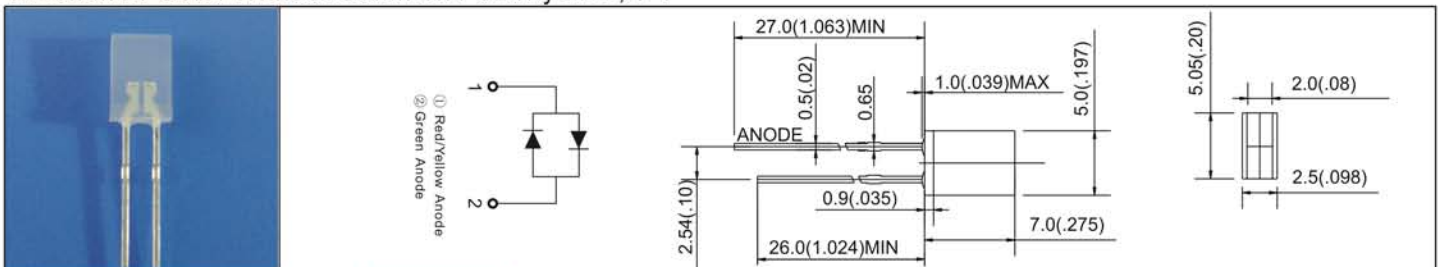
506IGM2E	GaAsP/GaP	Hi-Eff Red	625	White Diffused	2.0	2.8	10	1.0	3.0	60
	GaP	Yellow Green	570		2.1	2.8		1.0	3.0	
506YGM2E	GaAsP/GaP	Yellow	590		2.0	2.8		1.0	3.0	
	GaP	Yellow Green	570		2.0	2.8		1.0	3.0	

5mm Bi-Color With Common Cathode (0.1"Lead Pitch) LED, T-1



509IGM2E	GaAsP/GaP	Hi-Eff Red	625	White Diffused	2.0	2.8	10	1.0	3.0	70
	GaP	Yellow Green	570		2.1	2.8		1.0	3.0	
509YGM2E	GaAsP/GaP	Yellow	590		2.0	2.8		1.0	3.0	
	GaP	Yellow Green	570		2.0	2.8		1.0	3.0	

2×5mm Bi-Color Without Common Polarity LED, T-1



257IGM1G	GaAsP/GaP	Hi-Eff Red	625	White Diffused	2.0	2.8	10	1.0	3.0	150
	GaP	Yellow Green	570		2.1	2.8		1.0	3.0	
257YGM1G	GaAsP/GaP	Yellow	590		2.0	2.8		1.0	3.0	
	GaP	Yellow Green	570		2.0	2.8		1.0	3.0	

1. All dimensions are in millimeters(inches)  
 2. Tolerance is ±0.25mm(0.01" ) unless otherwise noted

Part Number LL-XXXX	Chip			Lens Color	Vf(V)		Iv (mcd)			Viewing Angle 2θ 1/2
	Material	Emitted Color	W/L (nm)		Typ	Max	IF=mA	Min	Typ	

### 3mm Bi-Color Without Common Polarity LED, T-1

307IGM2E	GaAsP/GaP	Hi-Eff Red	625	White Diffused	2.0	2.8	10	1.0	6.0	75
	GaP	Yellow Green	570		2.1	2.8		1.0	6.0	
307YGM2E	GaAsP/GaP	Yellow	590		2.0	2.8		1.0	6.0	
	GaP	Yellow Green	570		2.0	2.8		1.0	6.0	

### 3mm Bi-Color With Common Cathode (2mm Lead Pitch) LED, T-1

3010IGM2E	GaAsP/GaP	Hi-Eff Red	625	White Diffused	2.0	2.8	10	1.0	6.0	50
	GaP	Yellow Green	570		2.1	2.8		1.0	6.0	
3010YGM2E	GaAsP/GaP	Yellow	590		2.0	2.8		1.0	6.0	
	GaP	Yellow Green	570		2.0	2.8		1.0	6.0	

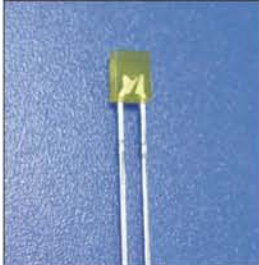
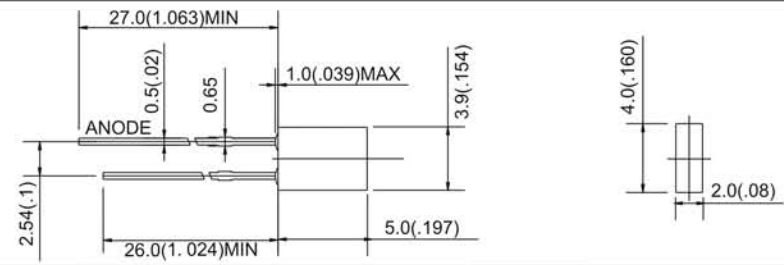
### 3mm Bi-Color With Common Cathode (0.1" Lead Pitch) LED, T-1

309IGM2E	GaAsP/GaP	Hi-Eff Red	625	White Diffused	2.0	2.8	10	1.0	6.0	70
	GaP	Yellow Green	570		2.1	2.8		1.0	6.0	
309YGM2E	GaAsP/GaP	Yellow	590		2.0	2.8		1.0	6.0	
	GaP	Yellow Green	570		2.0	2.8		1.0	6.0	

1. All dimensions are in millimeters(inches)  
 2. Tolerance is ±0.25mm(0.01" ) unless otherwise noted


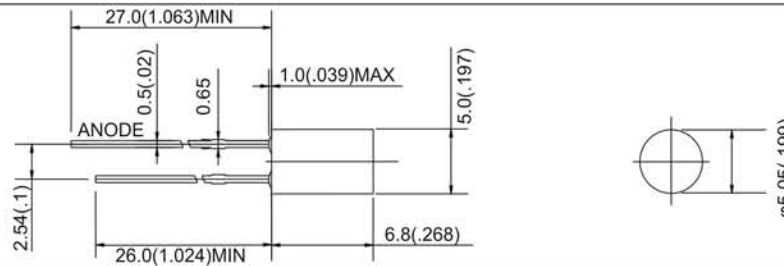
Part Number LL-XXXX	Chip			Lens Color	Vf(V)		Iv (mcd)			Viewing Angle 2θ 1/2
	Material	Emitted Color	W/L (nm)		Typ	Max	IF=mA	Min	Typ	

2x4mm Rectangular Flangeless LED


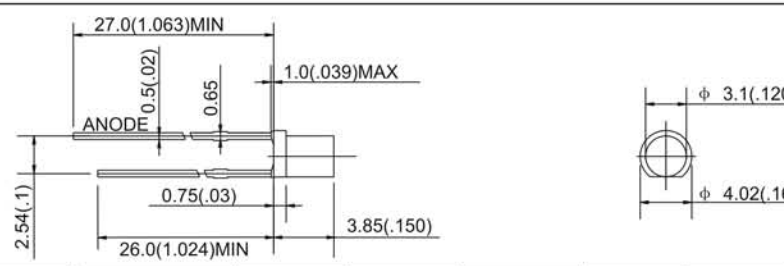
244SD3D	GaAlAs	Super Red	640	Color Diffused	1.8	2.4	10	1.0	3.0	170
244GD3D	GaP	Yellow Green	570		2.2	2.6		1.0	3.0	
244YD3D	GaAsP/GaP	Yellow	590		2.2	2.6		1.0	3.0	
244AD3D	GaAsP	Amber	605		2.0	2.6		1.0	3.0	

5mm Cylindrical Without Flange LED

503SD2Q	GaAlAs	Super Red	640	Color Diffused	1.8	2.4	10	1.0	3.0	125
503GD2Q	GaP	Yellow Green	570		2.2	2.6		1.0	3.0	
503YD2Q	GaAsP/GaP	Yellow	590		2.2	2.6		1.0	3.0	
503AD2Q	GaAsP	Amber	605		2.0	2.6		1.0	3.0	

3mm Cylindrical With Flange LED


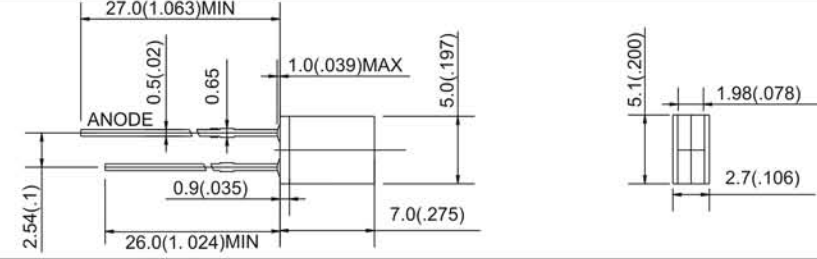
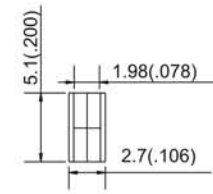



304SD1X	GaAlAs	Super Red	640	Color Diffused	1.8	2.4	10	1.0	3.0	125
304GD1X	GaP	Yellow Green	570		2.2	2.6		1.0	3.0	
304YD1X	GaAsP/GaP	Yellow	590		2.2	2.6		1.0	3.0	
304AD1X	GaAsP	Amber	605		2.0	2.6		1.0	3.0	


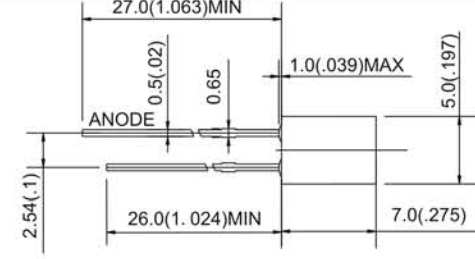
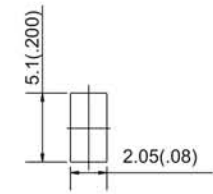
1. All dimensions are in millimeters(inches)  
 2. Tolerance is ±0.25mm(0.01" ) unless otherwise noted

Part Number LL-XXXX	Chip			Lens Color	Vf(V)		Iv (mcd)			Viewing Angle 2θ 1/2
	Material	Emitted Color	W/L (nm)		Typ	Max	IF=mA	Min	Typ	


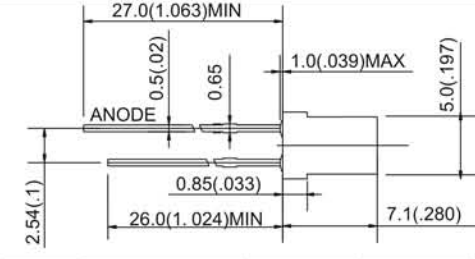
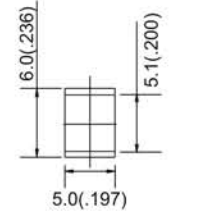
**2x5mm Rectangular With Flange LED**

										
253SD1G	GaAlAs	Super Red	640	Color Diffused	1.8	2.4	10	1.0	3.0	120
253GD1G	GaP	Yellow Green	570		2.2	2.6		1.0	3.0	
253YD1G	GaAsP/GaP	Yellow	590		2.2	2.6		1.0	3.0	
253AD1G	GaAsP	Amber	605		2.0	2.6		1.0	3.0	

**2x5mm Rectangular Flangeless LED**

										
253SD1F	GaAlAs	Super Red	640	Color Diffused	1.8	2.4	10	1.0	3.0	120
253GD1F	GaP	Yellow Green	570		2.2	2.6		1.0	3.0	
253YD1F	GaAsP/GaP	Yellow	590		2.2	2.6		1.0	3.0	
253AD1F	GaAsP	Amber	605		2.0	2.6		1.0	3.0	

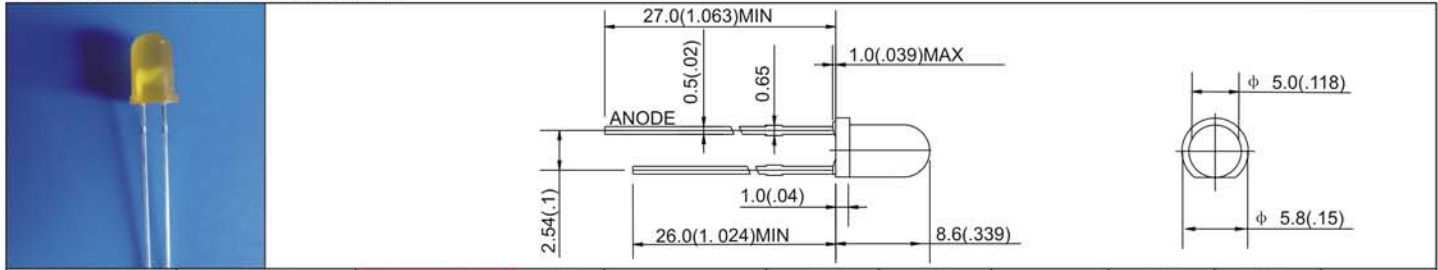
**5x5mm Square With Flange LED**

										
553SD1D	GaAlAs	Super Red	640	Color Diffused	1.8	2.4	10	1.0	3.0	180
553GD1D	GaP	Yellow Green	570		2.2	2.6		1.0	3.0	
553YD1D	GaAsP/GaP	Yellow	590		2.2	2.6		1.0	3.0	
553AD1D	GaAsP	Amber	605		2.0	2.6		1.0	3.0	

1. All dimensions are in millimeters(inches)  
 2. Tolerance is ±0.25mm(0.01" ) unless otherwise noted

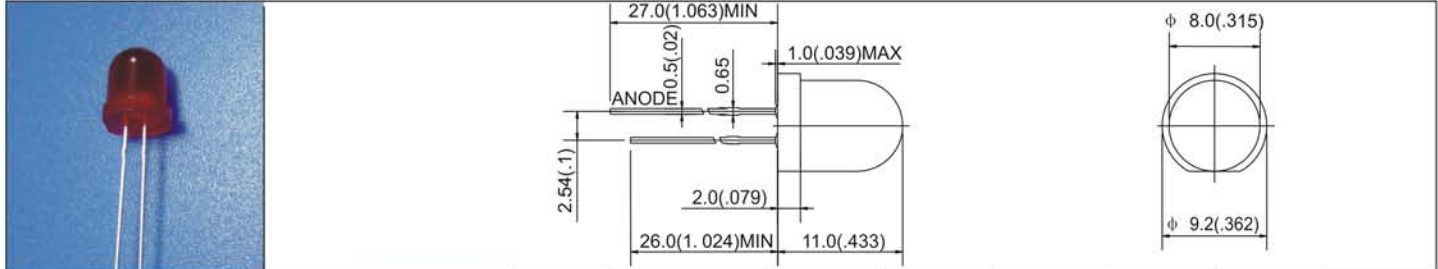
Part Number LL-XXXX	Chip			Lens Color	Vf(V)		Iv (mcd)			Viewing Angle 2θ 1/2
	Material	Emitted Color	W/L (nm)		Typ	Max	IF=mA	Min	Typ	

5mm Round Standard LED, T-1



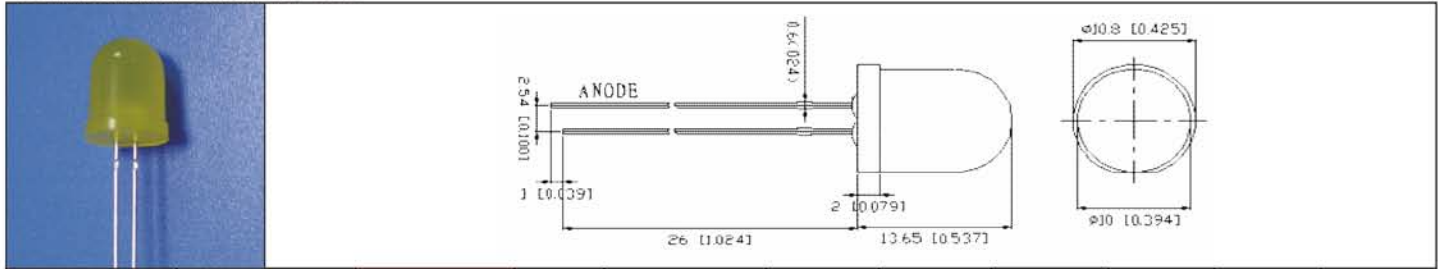
503SD2E	GaAlAs	Super Red	640	Color Diffused	1.8	2.4	10	5.0	15.0	60
503GD2E	GaP	Yellow Green	570		2.2	2.6		5.0	13.0	
503YD2E	GaAsP/GaP	Yellow	590		2.2	2.6		5.0	12.0	
503AD2E	GaAsP	Amber	605		2.0	2.6		5.0	10.0	

8mm Round Standard LED



803SD2C	GaAlAs	Super Red	640	Color Diffused	1.8	2.4	10	3.0	12.0	40
803GD2C	GaP	Yellow Green	570		2.2	2.6		3.0	10.0	
803YD2C	GaAsP/GaP	Yellow	590		2.2	2.6		3.0	10.0	
803AD2C	GaAsP	Amber	605		2.0	2.6		3.0	8.0	

10mm Round Standard LED

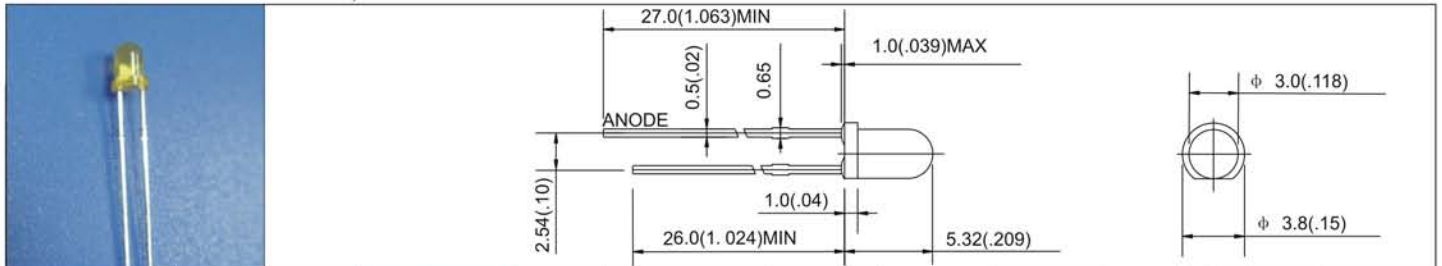


1003SD2R	GaAlAs	Super Red	640	Color Diffused	1.8	2.4	10	9.0	20	40
1003GD2R	GaP	Yellow Green	570		2.2	2.6		9.0	20	
1003YD2R	GaAsP/GaP	Yellow	590		2.2	2.6		6.0	13	
1003AD2R	GaAsP	Amber	605		2.0	2.6		6.0	13	

1. All dimensions are in millimeters(Inches)  
 2. Tolerance is ±0.25mm(0.01" ) unless otherwise noted

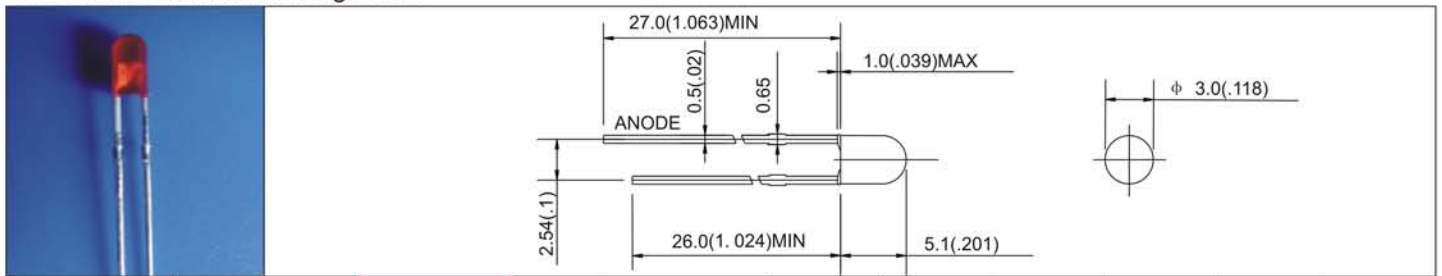
Part Number LL-XXXX	Chip			Lens Color	Vf(V)		Iv (mcd)			Viewing Angle 2θ 1/2
	Material	Emitted Color	W/L (nm)		Typ	Max	IF=mA	Min	Typ	

3mm Round Standard LED, T-1



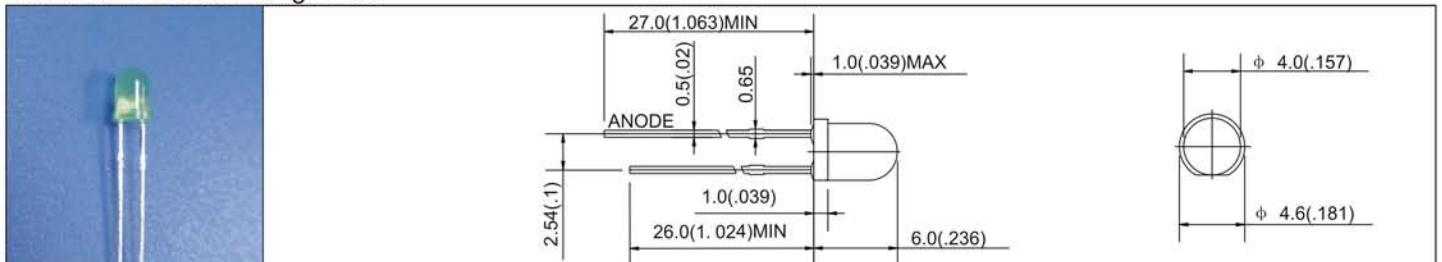
304HD2E	GaP	Red	700	Color Diffused	2.2	2.6	10	1.0	3.0	60
304GD2E	GaP	Yellow Green	570		2.2	2.6		6.0	18.0	
304YD2E	GaAsP/GaP	Yellow	590		2.2	2.6		6.0	15.0	
304AD2E	GaAsP	Amber	605		2.0	2.6		6.0	12.0	

3mm Round Without Flange LED



304HD2J	GaP	Red	700	Color Diffused	2.2	2.6	10	1.0	3.0	60
304SD2J	GaAlAs	Super Red	640		1.8	2.4		6.0	20.0	
304GD2J	GaP	Yellow Green	570		2.2	2.6		6.0	18.0	
304YD2J	GaAsP/GaP	Yellow	590		2.2	2.6		6.0	15.0	
304AD2J	GaAsP	Amber	605		2.0	2.6		6.0	12.0	

4mm Round With Flange LED

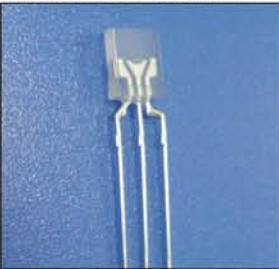
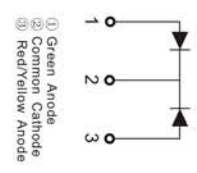
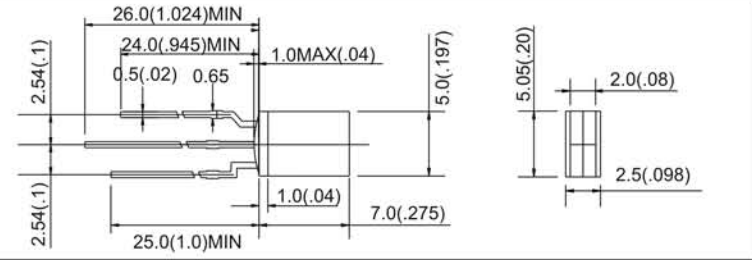


403SD2B	GaAlAs	Super Red	640	Color Diffused	1.8	2.4	10	5.0	15.0	60
403GD2B	GaP	Yellow Green	570		2.2	2.6		5.0	13.0	
403YD2B	GaAsP/GaP	Yellow	590		2.2	2.6		5.0	12.0	
403AD2B	GaAsP	Amber	605		2.0	2.6		5.0	10.0	


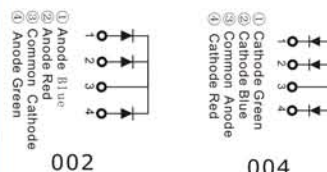
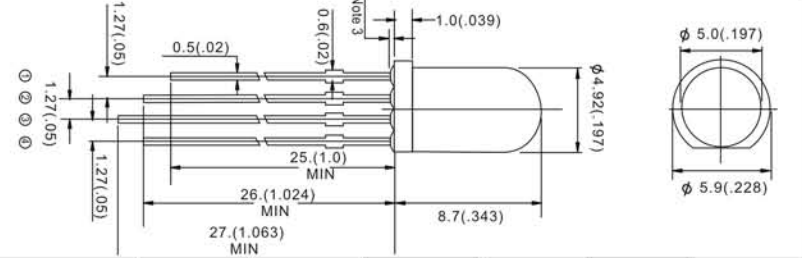
1. All dimensions are in millimeters(inches)  
 2. Tolerance is ±0.25mm(0.01" ) unless otherwise noted

Part Number LL-XXXX	Chip			Lens Color	Vf(V)		Iv (mcd)			Viewing Angle 2θ 1/2
	Material	Emitted Color	W/L (nm)		Typ	Max	IF=mA	Min	Typ	

### 2×5mm Bi-Color With Common Cathode (0.1"Lead Pitch) LED,T-1

										
	2591GM1G	GaAsP/GaP	Hi-Eff Red	625	White Diffused	2.0	2.8	10	1.0	3.0
	GaP	Yellow Green	570	2.1		2.8	1.0		3.0	
259YGM1G	GaAsP/GaP	Yellow	590	2.0		2.8	1.0		3.0	
	GaP	Yellow Green	570	2.0		2.8	1.0		3.0	

### 5mm Full Color With Common Cathode or Common Anode (1.27mm Lead Pitch) LED

										
	509RGBC2E-002	AllnGaP	Hyper Red	624	Water Clear	2.0	2.6	20	1600	3200
	InGaN	Pure Green	525	3.4		3.8	2000		4000	
	InGaN	Blue	470	3.4		3.8	1000		2000	
509RGBC2E-004	GaAlAs	Hyper Red	624	2.0		2.6	1600		3200	
	InGaN	Pure Green	525	3.4	3.8	2000	4000			
	InGaN	Blue	470	3.4	3.8	1000	2000			
509RGBM2E-002	AllnGaP	Hyper Red	624	White Diffused	2.0	2.6	20	350	600	60
	InGaN	Pure Green	525		3.4	3.8		450	1000	
	InGaN	Blue	470		3.4	3.8		250	500	
509RGBM2E-004	GaAlAs	Hyper Red	624		2.0	2.6		350	600	
	InGaN	Pure Green	525	3.4	3.8	450	1000			
	InGaN	Blue	470	3.4	3.8	250	500			

1. All dimensions are in millimeters(inches)  
 2. Tolerance is ±0.25mm(0.01" ) unless otherwise noted