

# Kingbright

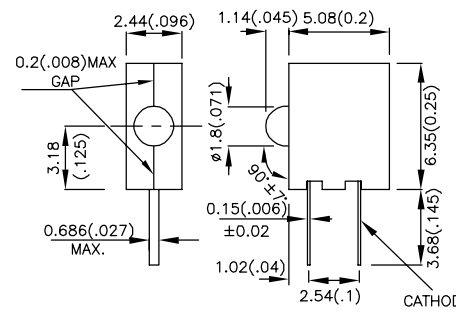

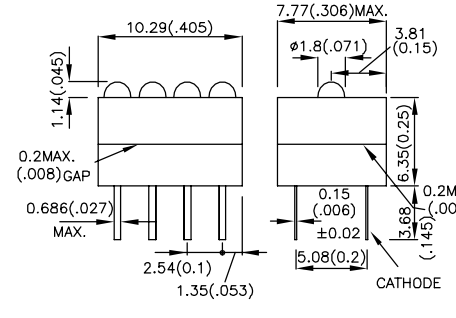
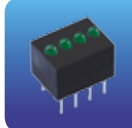
## Optoelectronic Components

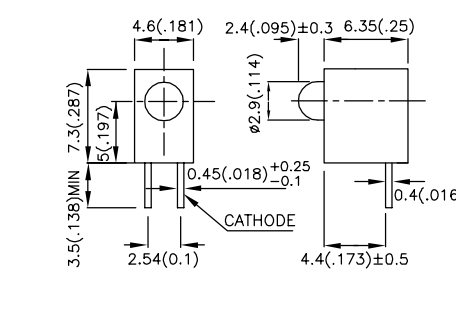

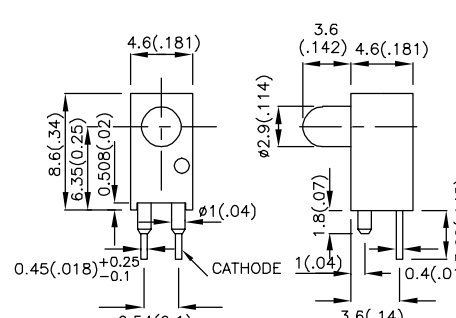

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## SINGLE-LEVEL CBI

Part Number	Material	λD (nm)	Lens Type	Iv (mcd) @20mA V=5V		Viewing Angle 2θ1/2	Dimension
				Min.	Typ.		
KM2520EH/1ID	GaAsP/GaP	617	red diffused	8	16	40°	Subminiature Solid State Lamps  
KM2520EH/1ID-5V	GaAsP/GaP	617	red diffused	*3	*8	40°	
KM2520EH/1YD	GaAsP/GaP	588	yellow diffused	5	10	40°	
KM2520EH/1YD-5V	GaAsP/GaP	588	yellow diffused	*1.2	*3	40°	
KM2520EH/1SGD	GaP	568	green diffused	5	12	40°	
KM2520EH/1SGD-5V	GaP	568	green diffused	*3	*8	40°	
KM2520EG/4ID	GaAsP/GaP	617	red diffused	8	16	40°	Subminiature Solid State Lamps  
KM2520EG/4ID-5V	GaAsP/GaP	617	red diffused	*3	*8	40°	
KM2520EG/4YD	GaAsP/GaP	588	yellow diffused	5	10	40°	
KM2520EG/4YD-5V	GaAsP/GaP	588	yellow diffused	*1.2	*3	40°	
KM2520EG/4SGD	GaP	568	green diffused	5	12	40°	
KM2520EG/4SGD-5V	GaP	568	green diffused	*3	*8	40°	

Part Number	Material	λD (nm)	Lens Type	Iv (mcd) @10mA *20mA		Viewing Angle 2θ1/2	Dimension
				Min.	Typ.		
L-710A8CB/1ID	GaAsP/GaP	617	red diffused	6	12	40°	T-1 (3mm) Right Angle  
L-710A8CB/1YD	GaAsP/GaP	588	yellow diffused	6	15	40°	
L-710A8CB/1GD	GaP	568	green diffused	8	25	40°	
L-710A8RS/1ID	GaAsP/GaP	617	red diffused	6	12	40°	T-1 (3mm) Right Angle  
L-710A8RS/1YD	GaAsP/GaP	588	yellow diffused	6	15	40°	
L-710A8RS/1GD	GaP	568	green diffused	8	25	40°	

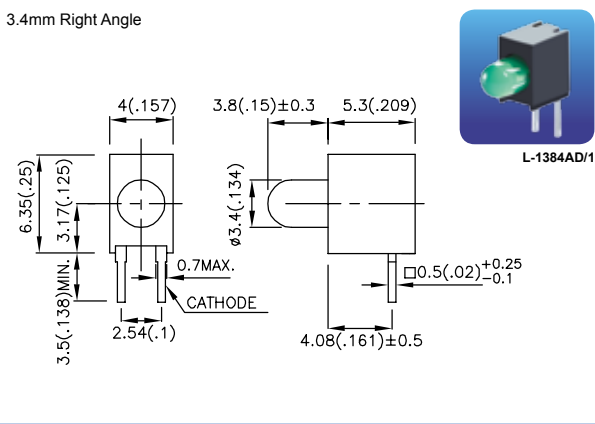
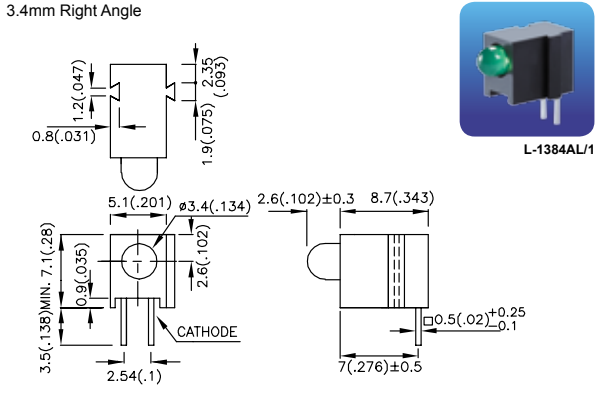
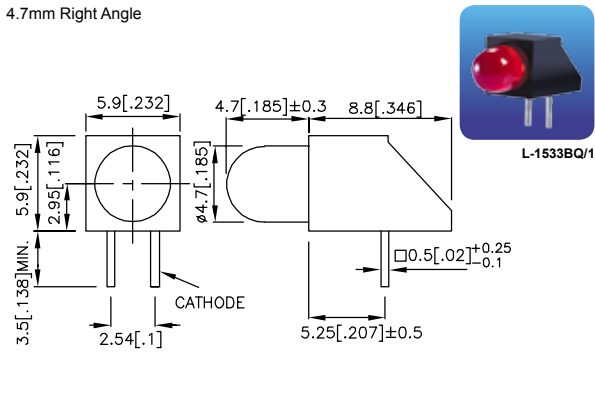
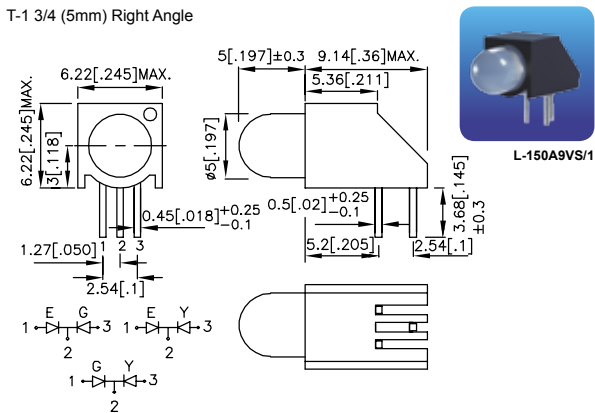
NOTES:  
 1. All dimensions are in millimeters(inches).  
 2. Tolerance is ±0.25mm(0.01") unless otherwise noted.

SINGLE-LEVEL CBI

Part Number	Material	$\lambda_D$ (nm)	Lens Type	Iv (mcd) @10mA *20mA		Viewing Angle 2 $\theta$ 1/2	Dimension
				Min.	Typ.		
L-7104ZH/1ID	GaAsP/GaP	617	red diffused	10	20	40°	<p>T-1 (3mm) Right Angle</p>
L-7104ZH/1YD	GaAsP/GaP	588	yellow diffused	8	15	40°	
L-7104ZH/1GD	GaP	568	green diffused	10	25	40°	
L-130WARA/1MBNW	GaN	466	white diffused	*10	*30	60°	<p>T-1 (3mm) Right Angle</p>
	GaAsP/GaP	602		*10	*30		
L-130WDT/1EGW	GaAsP/GaP	617	white diffused	*10	*24	60°	<p>T-1 (3mm) Right Angle</p>
	GaP	568		*12	*30		
L-130WDT/1EYW	GaAsP/GaP	617	white diffused	*10	*24	60°	<p>T-1 (3mm) Right Angle</p>
	GaAsP/GaP	588		*10	*20		
L-130WDT/1GYW	GaP	568	white diffused	*18	*40	60°	<p>T-1 (3mm) Right Angle</p>
	GaAsP/GaP	588		*10	*20		
L-42WUM/1EGWT	GaAsP/GaP	617	white diffused	*4	*8	100°	<p>T-1 (3mm) Right Angle</p>
	GaP	568		*4	*12		
L-42WUM/1EYWT	GaAsP/GaP	617	white diffused	*4	*8	100°	<p>T-1 (3mm) Right Angle</p>
	GaAsP/GaP	588		*2	*6		
L-42WUM/1GYWT	GaP	568	white diffused	*4	*10	100°	<p>T-1 (3mm) Right Angle</p>
	GaAsP/GaP	588		*2	*6		

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

### SINGLE-LEVEL CBI

Part Number	Material	λD (nm)	Lens Type	Iv (mcd) @10mA *20mA		Viewing Angle 2θ1/2	Dimension
				Min.	Typ.		
L-1384AD/1ID	GaAsP/GaP	617	red diffused	8	16	60°	<p>3.4mm Right Angle</p>  <p>4(.157) 3.8(.15)±0.3 5.3(.209) 6.35(.25) 3.17(.125) 0.7MAX. 3.5(.138)MIN. 2.54(.1) 3.4(.134) 4.08(.161)±0.5 0.5(.02)<sup>+0.25</sup><sub>-0.1</sub></p> <p>L-1384AD/1</p>
L-1384AD/1YD	GaAsP/GaP	588	yellow diffused	8	15	60°	
L-1384AD/1GD	GaP	568	green diffused	10	20	60°	
L-1384AL/1ID	GaAsP/GaP	617	red diffused	8	16	60°	<p>3.4mm Right Angle</p>  <p>1.2(.047) 0.8(.031) 1.9(.075) 5.1(.201) 2.6(.102) 2.6(.102) 3.4(.134) 2.6(.102)±0.3 8.7(.343) 3.5(.138)MIN. 7.1(.28) 0.9(.035) 2.54(.1) 7(.276)±0.5 0.5(.02)<sup>+0.25</sup><sub>-0.1</sub></p> <p>L-1384AL/1</p>
L-1384AL/1YD	GaAsP/GaP	588	yellow diffused	8	15	60°	
L-1384AL/1GD	GaP	568	green diffused	10	20	60°	
L-1533BQ/1ID	GaAsP/GaP	617	red diffused	12	30	60°	<p>4.7mm Right Angle</p>  <p>5.9[.232] 4.7[.185]±0.3 8.8[.346] 5.9[.232] 2.95[.116] 4.7[.185] 3.5[.138]MIN. 2.54[.1] 5.25[.207]±0.5 0.5[.02]<sup>+0.25</sup><sub>-0.1</sub></p> <p>L-1533BQ/1</p>
L-1533BQ/1YD	GaAsP/GaP	588	yellow diffused	15	40	60°	
L-1533BQ/1GD	GaP	568	green diffused	20	50	60°	
L-150A9VS/1EGW	GaAsP/GaP	617	white diffused	*12	*30	30°	<p>T-1 3/4 (5mm) Right Angle</p>  <p>6.22[.245]MAX. 5[.197]±0.3 9.14[.36]MAX. 6.22[.245]MAX. 3[.118] 5.36[.211] 6.22[.245]MAX. 3[.118] 0.45[.018]<sup>+0.25</sup><sub>-0.1</sub> 0.5[.02]<sup>+0.25</sup><sub>-0.1</sub> 1.27[.050] 2.54[.1] 5.2[.205] 2.54[.1] 3.68[.145]±0.3</p> <p>L-150A9VS/1</p>
	GaP	568		*18	*50		
L-150A9VS/1EYW	GaAsP/GaP	617	white diffused	*12	*30		
	GaAsP/GaP	588		*8	*20		
L-150A9VS/1GYW	GaP	568	white diffused	*18	*50		
	GaAsP/GaP	588		*8	*20		

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

## SINGLE-LEVEL CBI

Part Number	Material	$\lambda_D$ (nm)	Lens Type	Iv (mcd) @10mA *20mA		Viewing Angle 2 $\theta$ 1/2	Dimension			
				Min.	Typ.					
L-59BL/1EGW	GaAsP/GaP	617	white diffused	*20	*40	60°	<p>T-1 3/4 (5mm) Right Angle</p>			
	GaP	568		*20	*60					
L-59BL/1EYW	GaAsP/GaP	617	white diffused	*20	*40					
	GaAsP/GaP	588		*20	*40					
L-59BL/1GYW	GaP	568	white diffused	*50	*100					
	GaAsP/GaP	588		*20	*40					
L-59CB/1EGW	GaAsP/GaP	617	white diffused	*20	*40				<p>T-1 3/4 (5mm) Right Angle</p>	
	GaP	568		*20	*60					
L-59CB/1EYW	GaAsP/GaP	617	white diffused	*20	*40					
	GaAsP/GaP	588		*20	*40					
L-59CB/1GYW	GaP	568	white diffused	*50	*100					
	GaAsP/GaP	588		*20	*40					

## BI-LEVEL CBI

Part Number	Material	$\lambda_D$ (nm)	Lens Type	Iv (mcd) @10mA		Viewing Angle 2 $\theta$ 1/2	Dimension
				Min.	Typ.		
L-4060VH/2ID	GaAsP/GaP	617	red diffused	4	8	70°	<p>1.8mm Bi-Level</p>
L-4060VH/2YD	GaAsP/GaP	588	yellow diffused	4	8	70°	
L-4060VH/2GD	GaP	568	green diffused	6	12	70°	
L-144HX/2GDT	GaP	568	green diffused	2	6	110°	

NOTES:  
 1. All dimensions are in millimeters(inches).  
 2. Tolerance is  $\pm 0.25\text{mm}(0.01")$  unless otherwise noted.

## BI-LEVEL CBI

Part Number	Material	λD (nm)	Lens Type	Iv (mcd) @10mA		Viewing Angle 2θ1/2	Dimension
				Min.	Typ.		
L-7104EB/2ID	GaAsP/GaP	617	red diffused	10	20	40°	<p>T-1 (3mm) Bi-Level</p> <p>L-7104EB/2</p>
L-7104EB/2YD	GaAsP/GaP	588	yellow diffused	8	15	40°	
L-7104EB/2GD	GaP	568	green diffused	10	25	40°	
L-7104GO/2ID	GaAsP/GaP	617	red diffused	10	20	40°	<p>T-1 (3mm) Bi-Level</p> <p>L-7104GO/2</p>
L-7104GO/2YD	GaAsP/GaP	588	yellow diffused	8	15	40°	
L-7104GO/2GD	GaP	568	green diffused	10	25	40°	
L-7104MD/2ID	GaAsP/GaP	617	red diffused	10	20	40°	<p>T-1 (3mm) Bi-Level</p> <p>L-7104MD/2</p>
L-7104MD/2YD	GaAsP/GaP	588	yellow diffused	8	15	40°	
L-7104MD/2GD	GaP	568	green diffused	10	25	40°	
L-7104RT/2ID	GaAsP/GaP	617	red diffused	10	20	40°	<p>T-1 (3mm) Bi-Level</p> <p>L-7104RT/2</p>
L-7104RT/1G1YD	GaP	568	green diffused	10	25	40°	
L-7104RT/1G1YD	GaAsP/GaP	588	yellow diffused	8	15	40°	

NOTES:  
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 2. Tolerance is ±0.25mm(0.01") unless otherwise noted.

BI-LEVEL CBI

Part Number	Material	λD (nm)	Lens Type	Iv (mcd) @10mA *20mA		Viewing Angle 2θ1/2	Dimension	
				Min.	Typ.			
L-130WCP/2EGW	GaAsP/GaP	617	white diffused	*10	*24	60°	<p>T-1(3mm) Bi-Level</p> <p>L-130WCP/2</p>	
	GaP	568		*12	*30			
L-130WCP/2EYW	GaAsP/GaP	617	white diffused	*10	*24	60°		
	GaAsP/GaP	588		*10	*20			
L-130WCP/2GYW	GaP	568	white diffused	*18	*40	60°		
	GaAsP/GaP	588		*10	*20			
L-73EB/2IDA	GaAsP/GaP	617	red diffused	8	20	60°		<p>4.8mm Bi-Level</p> <p>L-73EB/2</p>
L-73EB/2YDA	GaAsP/GaP	588	yellow diffused	6	15	60°		
L-73EB/2GDA	GaP	568	green diffused	10	30	60°		
L-1503EB/2ID	GaAsP/GaP	617	red diffused	12	40	60°		
L-1503EB/2YD	GaAsP/GaP	588	yellow diffused	15	30	60°		
L-1503EB/2GD	GaP	568	green diffused	15	30	60°		

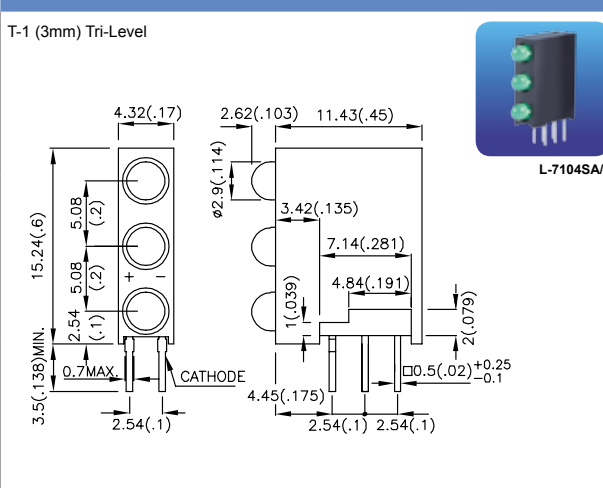
TRI-LEVEL CBI

Part Number	Material	λD (nm)	Lens Type	Iv (mcd) @10mA		Viewing Angle 2θ1/2	Dimension
				Min.	Typ.		
L-4060XHA/3ID	GaAsP/GaP	617	red diffused	4	8	70°	<p>1.8mm Tri-Level</p> <p>L-4060XHA/3</p>
L-4060XHA/3YD	GaAsP/GaP	588	yellow diffused	4	8	70°	
L-4060XHA/3GD	GaP	568	green diffused	6	12	70°	

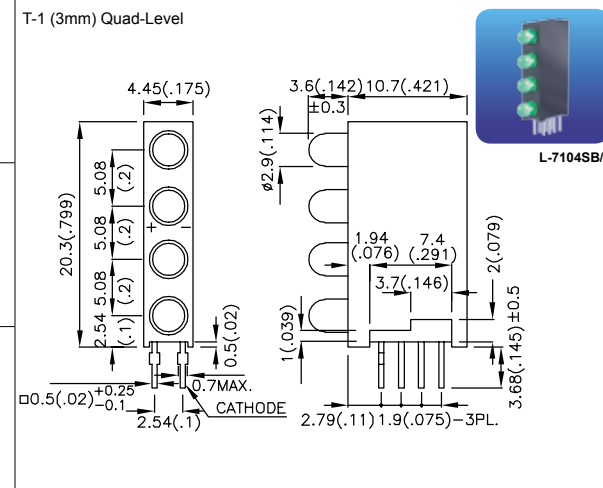
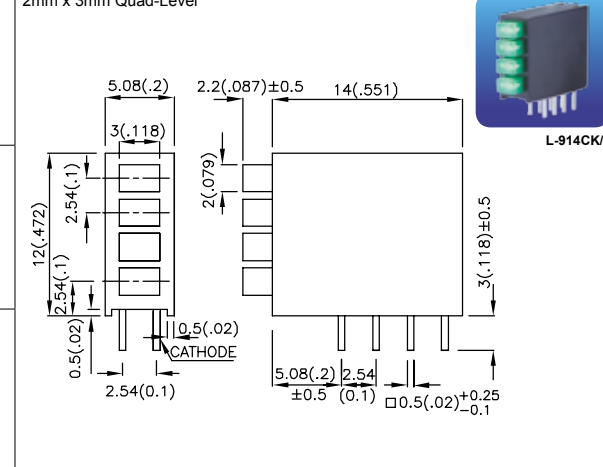
NOTES:

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

### TRI-LEVEL CBI

Part Number	Material	$\lambda_D$ (nm)	Lens Type	Iv (mcd) @10mA		Viewing Angle	Dimension
				Min.	Typ.		
L-7104SA/3ID	GaAsP/GaP	617	red diffused	10	20	40°	T-1 (3mm) Tri-Level 
L-7104SA/3YD	GaAsP/GaP	588	yellow diffused	8	15	40°	
L-7104SA/3GD	GaP	568	green diffused	10	25	40°	

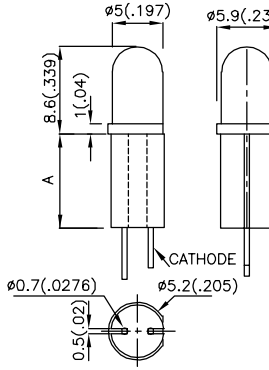
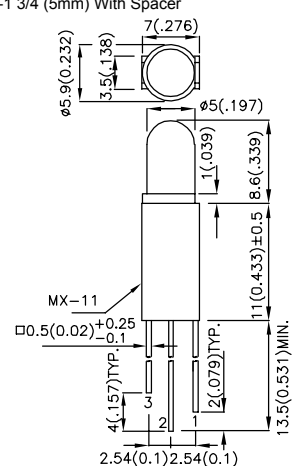
### QUAD-LEVEL CBI

Part Number	Material	$\lambda_D$ (nm)	Lens Type	Iv (mcd) @10mA		Viewing Angle	Dimension
				Min.	Typ.		
L-7104SB/4ID	GaAsP/GaP	617	red diffused	10	20	40°	T-1 (3mm) Quad-Level 
L-7104SB/4YD	GaAsP/GaP	588	yellow diffused	8	15	40°	
L-7104SB/4GD	GaP	568	green diffused	10	25	40°	
L-914CK/4IDT	GaAsP/GaP	617	red diffused	1.2	4	100°	2mm x 3mm Quad-Level 
L-914CK/4YDT	GaAsP/GaP	588	yellow diffused	1.5	4	100°	
L-914CK/4GDT	GaP	568	green diffused	3	6	100°	

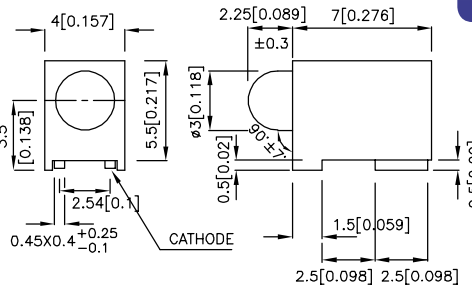
NOTES:  
 1. All dimensions are in millimeters (inches).  
 2. Tolerance is  $\pm 0.25\text{mm}$  ( $0.01''$ ) unless otherwise noted.



WITH SPACER

Part Number	Material	$\lambda_D$ (nm)	Lens Type	Iv (mcd) @10mA *20mA		Viewing Angle 2 $\theta$ 1/2	Dimension
				Min.	Typ.		
L-7113BR-5.08/ID L-7113BR-6.35/ID L-7113BR-9.52/ID L-7113BR-17.8/ID L-7113BR-23.5/ID	GaAsP/GaP	617	red diffused	18	40	30°	T-1 3/4 (5mm) With Spacer  L-7113BR-5.08/xxx (Dim. A : 5.08) L-7113BR-6.35/xxx (Dim. A : 6.35) L-7113BR-9.52/xxx (Dim. A : 9.52) L-7113BR-17.8/xxx (Dim. A : 17.8) L-7113BR-23.5/xxx (Dim. A : 23.5)
L-7113BR-5.08/YD L-7113BR-6.35/YD L-7113BR-9.52/YD L-7113BR-17.8/YD L-7113BR-23.5/YD	GaAsP/GaP	588	yellow diffused	10	25	30°	
L-7113BR-5.08/GD L-7113BR-6.35/GD L-7113BR-9.52/GD L-7113BR-17.8/GD L-7113BR-23.5/GD	GaP	568	green diffused	15	30	30°	
L-59MX-11/EGW	GaAsP/GaP	617	white diffused	*20	*40	60°	T-1 3/4 (5mm) With Spacer  MX-11 11(0.433)±0.5 13.5(0.531)MIN. 2.54(0.1) 2.54(0.1)
	GaP	568		*20	*60		


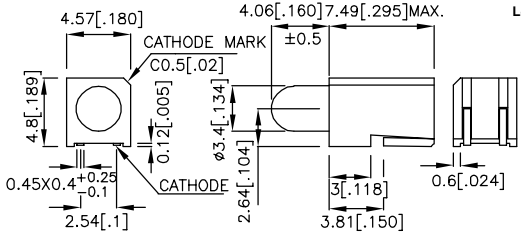

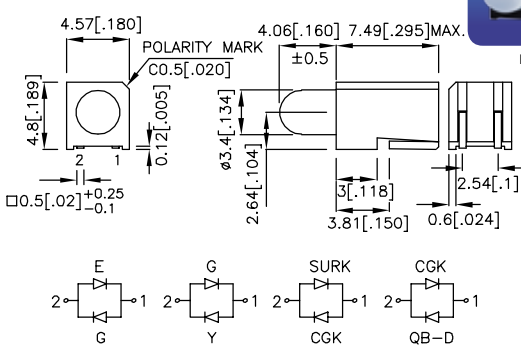
SMD CBI

Part Number	Material	$\lambda_D$ (nm)	Lens Type	Iv (mcd) @10mA		Viewing Angle 2 $\theta$ 1/2	Dimension
				Min.	Typ.		
L-96A8YVP/1GD/TG-0L	GaP	568	green diffused	12	25	60°	T-1 (3mm) Right Angle  L-96A8YVP1-0L

NOTES:

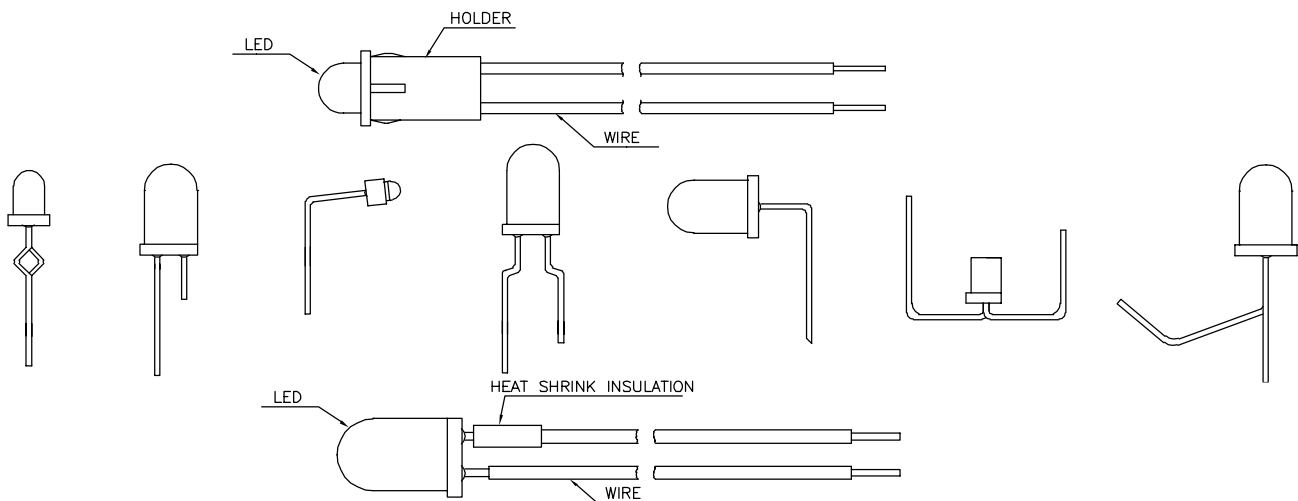
1. All dimensions are in millimeters(inches).
2. Tolerance is ±0.25mm(0.01") unless otherwise noted.

## SMD CBI

Part Number	Material	λD (nm)	Lens Type	Iv (mcd) @10mA *20mA		Viewing Angle	Dimension
				Min.	Typ.		
L-138A8QMP/1ID	GaAsP/GaP	617	red diffused	4	10	60°	3.4mm Right Angle  L-138A8QMP/1 
L-138A8QMP/1YD	GaAsP/GaP	588	yellow diffused	4	8	60°	
L-138A8QMP/1GD	GaP	568	green diffused	6	12	60°	
L-1387QMP/1EGW	GaAsP/GaP	617	white diffused	*6	*16	60°	3.4mm Right Angle  L-1387QMP/1 
	GaP	568		*10	*20		
L-1387QMP/1GYW	GaP	568	white diffused	*10	*20	60°	
	GaAsP/GaP	588		*5	*10		
L-1387QMP/1SURKCGKW	AlGaInP	630	white diffused	*60	*160	60°	
	AlGaInP	570		*50	*120		
L-1387QMP/1CGKQBDW	AlGaInP	570	white diffused	*50	*120	60°	
	InGaN	465		*60	*130		

## VALUE ADDED LED LAMPS

LED lamp with forming/wire leads available

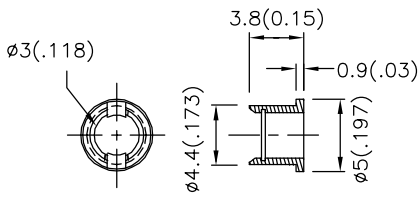


**NOTES:**

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

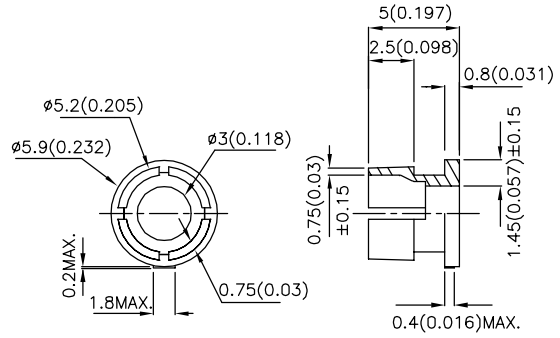
# LED CLIPS AND MOUNTS

RTC-31



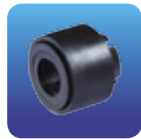
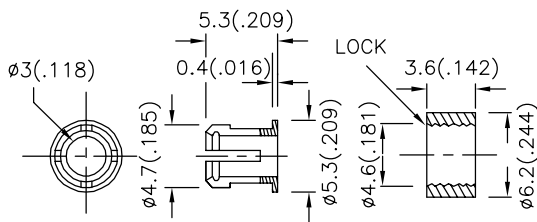
RTC-31

CB-30



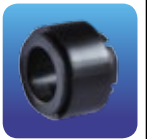
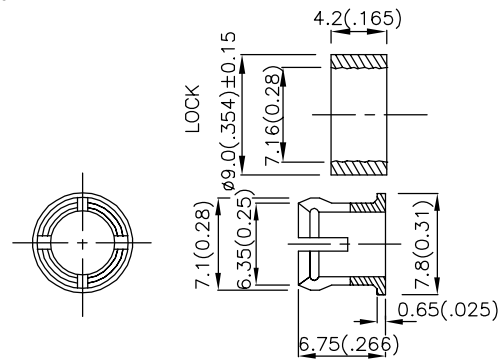
CB-30

RTC-32



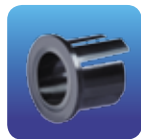
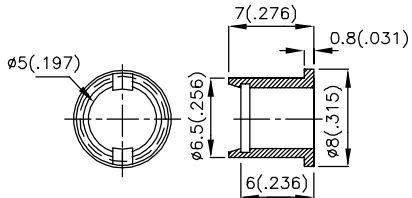
RTC-32

CB-50



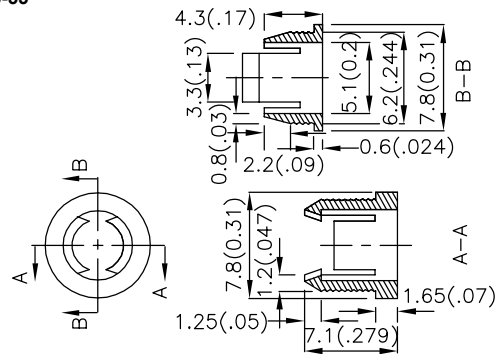
CB-50

RTC-51



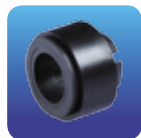
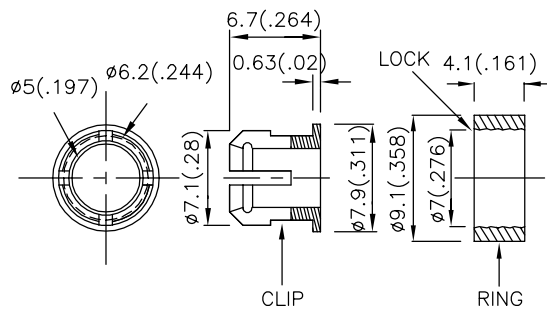
RTC-51

CB-55



CB-55

RTC-52

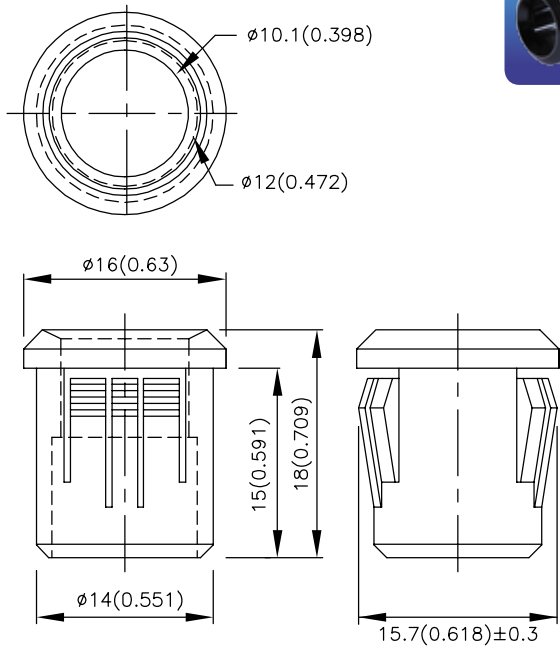


RTC-52

NOTES:

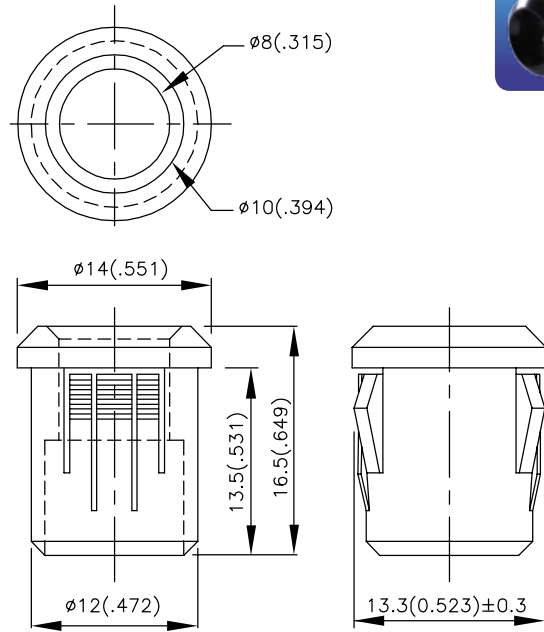
1. All dimensions are in millimeters(inches).
2. Tolerance is  $\pm 0.25\text{mm}(0.01")$  unless otherwise noted.

RTF-1090



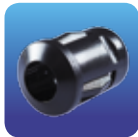
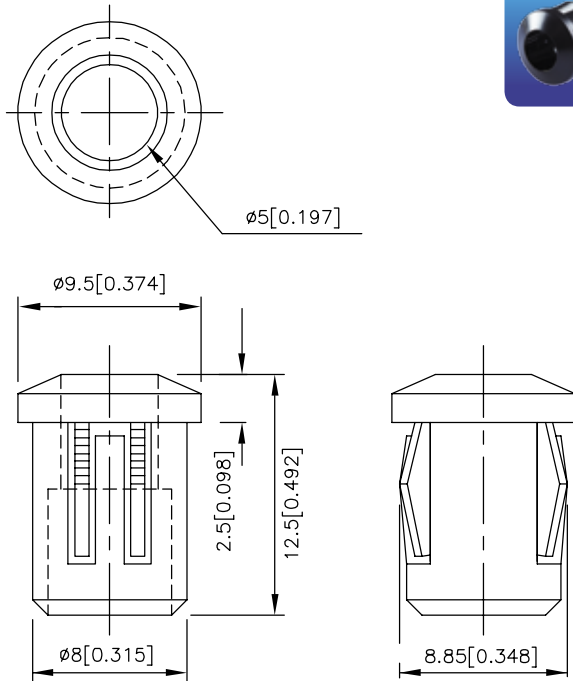
RTF-1090

RTF-8080



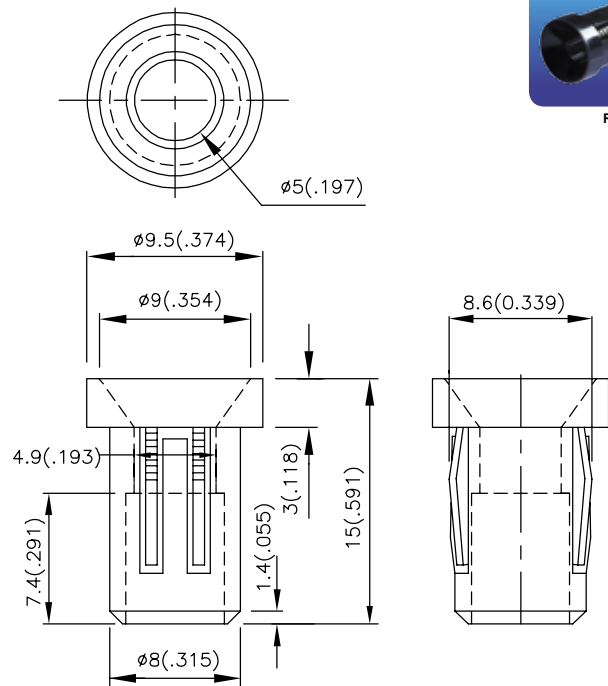
RTF-8080

RTF-5010



RTF-5010

RTF-5020



RTF-5020

NOTES:

1. All dimensions are in millimeters(inches).
2. Tolerance is  $\pm 0.25\text{mm}(0.01")$  unless otherwise noted.