

Kingbright

Optoelectronic Components

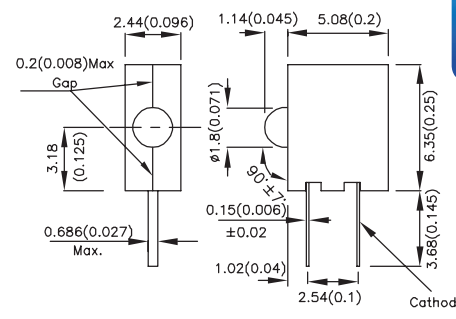

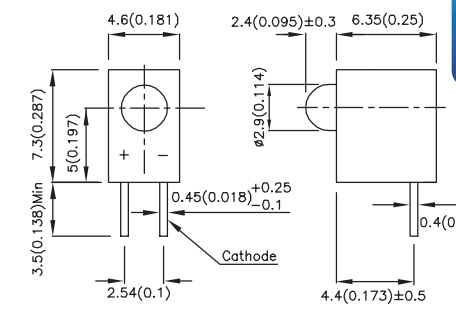

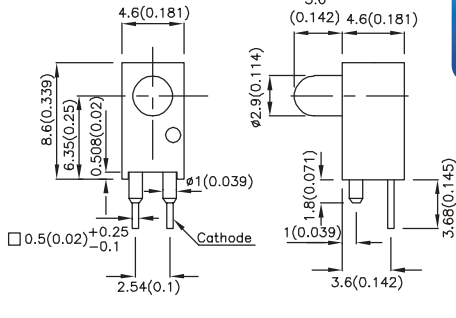

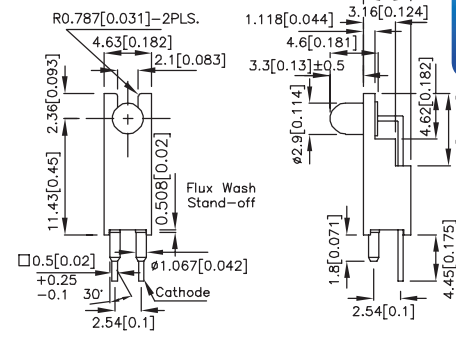

CIRCUIT BOARD INDICATOR

Single-Level CBI	72
Bi-Level CBI	75
Tri-Level CBI	77
Quad-Level CBI	78
With Spacer	78
SMD CBI	78

LED CLIPS AND MOUNTS

Value Added LED Lamps	81
-----------------------	----

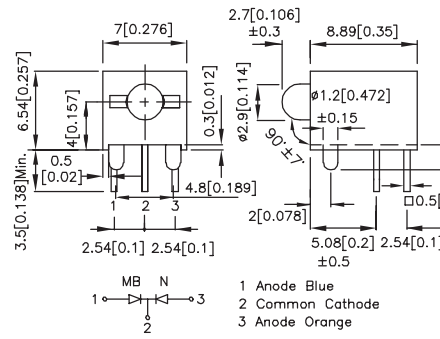

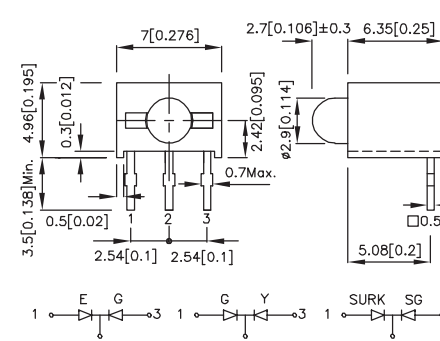

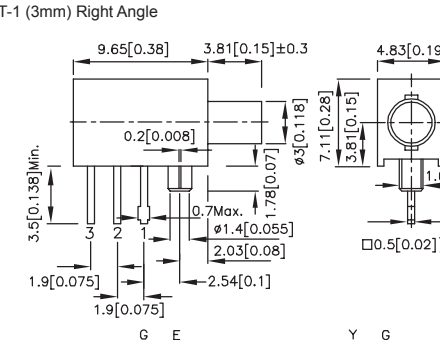
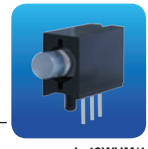
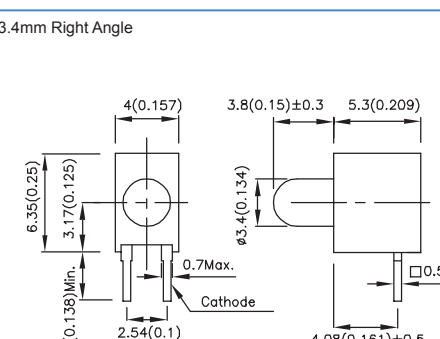
SINGLE-LEVEL CBI

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @10mA *20mA		Viewing Angle 2 θ 1/2	Dimensions
				Min.	Typ.		
KM2520EH/1ID	GaAsP/GaP	617	red diffused	*8	*16	40°	<p>Subminiature Solid State Lamps</p>  <p>2.44(0.096) 1.14(0.045) 5.08(0.2) 0.2(0.008)Max Gap 3.18 (0.125) 0.686(0.027) Max. 1.8(0.071) 0.15(0.006) ±0.02 1.02(0.04) 2.54(0.1) 6.35(0.25) 3.68(0.145) Cathode</p>  <p>KM2520EH/1</p>
KM2520EH/1YD	GaAsP/GaP	588	yellow diffused	*5	*10	40°	
KM2520EH/1SGD	GaP	568	green diffused	*5	*12	40°	
L-710A8CB/1ID	GaAsP/GaP	617	red diffused	6	12	50°	<p>T-1 (3mm) Right Angle</p>  <p>4.6(0.181) 2.4(0.095)±0.3 6.35(0.25) 7.3(0.287) 5(0.197) 3.5(0.138)Min 0.45(0.018)+0.25-0.1 Cathode 2.54(0.1) 4.4(0.173)±0.5 0.4(0.016)+0.25-0.1</p>  <p>L-710A8CB/1</p>
L-710A8CB/1YD	GaAsP/GaP	588	yellow diffused	6	15	50°	
L-710A8CB/1GD	GaP	568	green diffused	8	25	50°	
L-7104RS/1SRD	GaAlAs	640	red diffused	*50	*100	50°	<p>T-1 (3mm) Right Angle</p>  <p>4.6(0.181) 3.6(0.142) 4.6(0.181) 8.6(0.339) 6.35(0.25) 0.508(0.02) 0.5(0.02)+0.25-0.1 Cathode 2.54(0.1) 3.6(0.142) 3.68(0.145) 1.8(0.071) 1(0.039) 0.2(0.008)Max Gap 3.18 (0.125) 0.686(0.027) Max. 1.8(0.071) 0.15(0.006) ±0.02 1.02(0.04) 2.54(0.1) 6.35(0.25) 3.68(0.145) Cathode</p>  <p>L-7104RS/1</p>
L-7104RS/1YD	GaAsP/GaP	588	yellow diffused	8	15	50°	
L-7104RS/1GD	GaP	568	green diffused	10	25	50°	
L-7104ZH/1ID	GaAsP/GaP	617	red diffused	10	20	50°	<p>T-1 (3mm) Right Angle</p>  <p>R0.787[0.031]-2PLS. 4.63[0.182] 2.1[0.083] 4.83[0.19]Max. 1.118[0.044] 3.16[0.124] 4.6[0.181] 3.3[0.13]±0.5 4.62[0.182] 7.47[0.294] 2.36[0.093] 11.43[0.45] 2.54[0.1] 0.508[0.02] Flux Wash Stand-off 0.5[0.02] +0.25 -0.1 30° 1.067[0.042] Cathode 2.54[0.1] 1.8[0.071] 2.54[0.1] 4.45[0.175]</p>  <p>L-7104ZH/1</p>
L-7104ZH/1GD	GaP	568	green diffused	10	25	50°	

NOTES:

1. All dimensions are in millimeters(inches).
2. Tolerance is ±0.25mm(0.01") unless otherwise noted.
3. Luminous intensity value is traceable to CIE127-2007 standards.

SINGLE-LEVEL CBI

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @10mA *20mA		Viewing Angle 2 θ 1/2	Dimensions
				Min.	Typ.		
L-130WARA/1MBNW	GaN	466	white diffused	*10	*30	60°	T-1 (3mm) Right Angle  1 Anode Blue 2 Common Cathode 3 Anode Orange
	GaAsP/GaP	602		*10	*30		
L-130WDT/1EGW	GaAsP/GaP	617	white diffused	*10	*24	60°	T-1 (3mm) Right Angle  1 E G 2 3
	GaP	568		*12	*30		
L-130WDT/1GYW	GaP	568	white diffused	*18	*40	60°	T-1 (3mm) Right Angle  1 E G 2 3
	GaAsP/GaP	588		*10	*20		
L-130WDT/1SURKSGW-DTS	AlGaInP	630	white diffused	*100	*200	60°	T-1 (3mm) Right Angle  1 E G 2 3
	GaP	568		*12	*30		
L-42WUM/1EGWT	GaAsP/GaP	617	white diffused	*4	*8	140°	T-1 (3mm) Right Angle  3 G E 2 1
	GaP	568		*4	*12		
L-42WUM/1GYWT	GaP	568	white diffused	*4	*10	140°	T-1 (3mm) Right Angle  3 Y G 2 1
	GaAsP/GaP	588		*2	*6		
L-1384AD/1ID	GaAsP/GaP	617	red diffused	8	16	60°	3.4mm Right Angle  Cathode
L-1384AD/1YD	GaAsP/GaP	588	yellow diffused	8	15	60°	
L-1384AD/1GD	GaP	568	green diffused	10	20	60°	

NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
3. Luminous intensity value is traceable to CIE127-2007 standards.

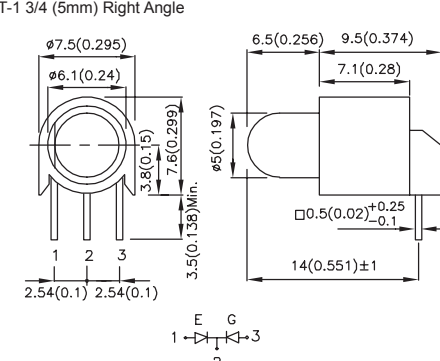
SINGLE-LEVEL CBI

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @10mA *20mA		Viewing Angle	Dimensions
				Min.	Typ.		
L-1384AL/1ID	GaAsP/GaP	617	red diffused	8	16	60°	<p>3.4mm Right Angle</p>
L-1384AL/1GD	GaP	568	green diffused	10	20	60°	
L-1533BQ/1ID	GaAsP/GaP	617	red diffused	12	30	30°	<p>4.7mm Right Angle</p>
L-1533BQ/1GD	GaP	568	green diffused	20	50	30°	
L-150A9VS/1EGW	GaAsP/GaP	617	white diffused	*12	*30	40°	<p>T-1 3/4 (5mm) Right Angle</p>
	GaP	568		*18	*50		
L-150A9VS/1GYW	GaP	568	white diffused	*18	*50	40°	<p>T-1 3/4 (5mm) Right Angle</p>
	GaAsP/GaP	588		*8	*20		
L-59BL/1EGW	GaAsP/GaP	617	white diffused	*20	*40	30°	<p>T-1 3/4 (5mm) Right Angle</p>
	GaP	568		*20	*60		
L-59BL/1GEW	GaP	568	white diffused	*50	*100	30°	<p>T-1 3/4 (5mm) Right Angle</p>
	GaAsP/GaP	617		*12	*35		

NOTES:

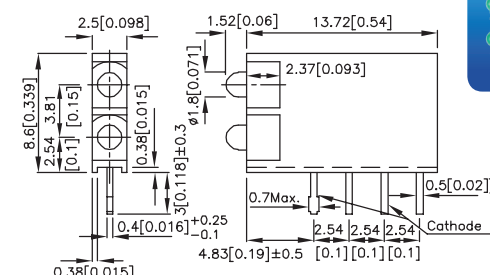
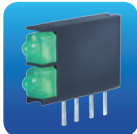
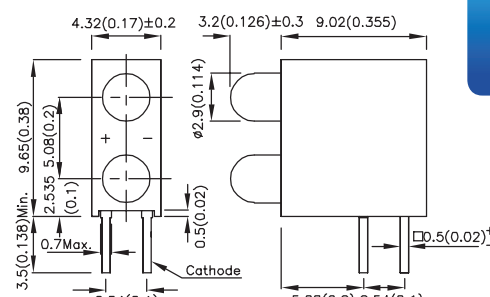
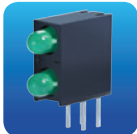
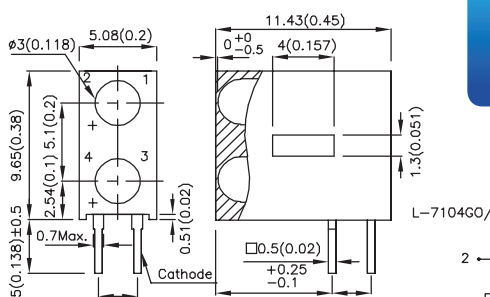

1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.
3. Luminous intensity value is traceable to CIE127-2007 standards.

SINGLE-LEVEL CBI

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @20mA		Viewing Angle 2 θ 1/2	Dimensions
				Min.	Typ.		
L-59CB/1EGW	GaAsP/GaP	617	white diffused	20	40	30°	<p>T-1 3/4 (5mm) Right Angle</p>  <p>1 2 3</p> <p>1 2 3</p>
	GaP	568		20	60		



BI-LEVEL CBI

Part Number	Material	λ D (nm)	Lens Type	Iv (mcd) @10mA *20mA		Viewing Angle	Dimensions
				Min.	Typ.		
L-4060VH/2ID	GaAsP/GaP	617	red diffused	4	8	70°	<div>1.8mm Bi-Level</div> <div></div> <div></div> <div>L-4060VH/2</div>
L-4060VH/2YD	GaAsP/GaP	588	yellow diffused	4	8	70°	
L-4060VH/2GD	GaP	568	green diffused	6	12	70°	
L-7104EB/2ID	GaAsP/GaP	617	red diffused	10	20	50°	<div>T-1 (3mm) Bi-Level</div> <div></div> <div></div> <div>L-7104EB/2</div>
L-7104EB/1Y1GD	GaAsP/GaP	588	yellow diffused	8	15	50°	
	GaP	568	green diffused	10	25	50°	
L-7104EB/2GD	GaP	568	green diffused	10	25	50°	
L-7104GO/2SRD	GaAlAs	640	red diffused	*50	*100	50°	<div>T-1 (3mm) Bi-Level</div> <div></div> <div></div> <div>L-7104GO/2</div>
L-7104GO/2GD	GaP	568	green diffused	10	25	50°	
L-7104GO/ 1CGK1CGKSYKC	AlGaInP	570	water clear	*150	*330	30°	
	AlGaInP	570	water clear	*55	*160	60°	
	AlGaInP	590		*100	*300		



NOTES:

1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.
3. Luminous intensity value is traceable to CIE127-2007 standards.

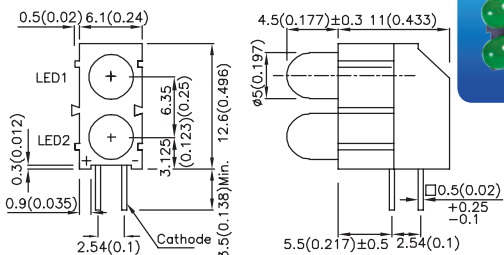
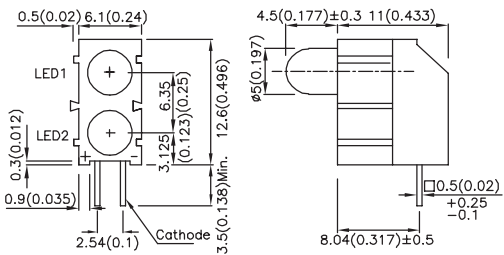
BI-LEVEL CBI

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @10mA *20mA		Viewing Angle 2 θ 1/2	Dimensions
				Min.	Typ.		
L-7104MD/1G1ID	GaP	568	green diffused	10	25	50°	T-1 (3mm) Bi-Level
	GaAsP/GaP	617	red diffused	10	20	50°	
L-7104MD/2YD	GaAsP/GaP	588	yellow diffused	8	15	50°	
L-7104MD/2GD	GaP	568	green diffused	10	25	50°	
L-7104RT/2ID	GaAsP/GaP	617	red diffused	10	20	50°	T-1 (3mm) Bi-Level
L-7104RT/1G1YD	GaP	568	green diffused	10	25	50°	
	GaAsP/GaP	588	yellow diffused	8	15	50°	
L-130WCP/2EGW	GaAsP/GaP	617	white diffused	*10	*24	60°	T-1(3mm) Bi-Level
	GaP	568		*12	*30		
L-130WCP/1MBN1XGW	GaN	466	white diffused	*10	*30	60°	L-130WCP/2EGW
	GaAsP/GaP	602		*10	*30		
	GaP	568	white diffused	*12	*30	60°	L-130WCP/1MBN1XGW
L-130WCP/2GYW	GaP	568	white diffused	*18	*40	60°	L-130WCP/2GYW
	GaAsP/GaP	588		*10	*20		
L-73EB/1G1YDA	GaP	568	green diffused	10	30	40°	4.8mm Bi-Level
	GaAsP/GaP	588	yellow diffused	6	15	40°	
L-73EB/2GDA	GaP	568	green diffused	10	30	40°	

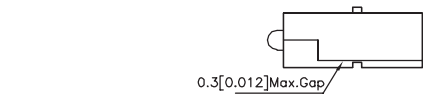
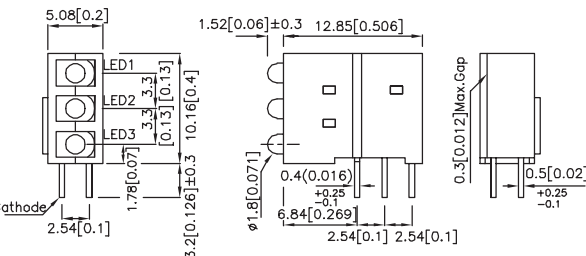
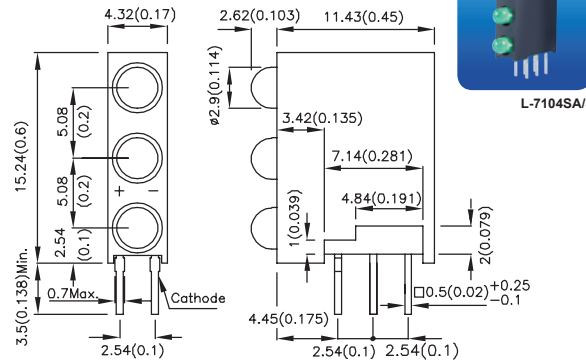
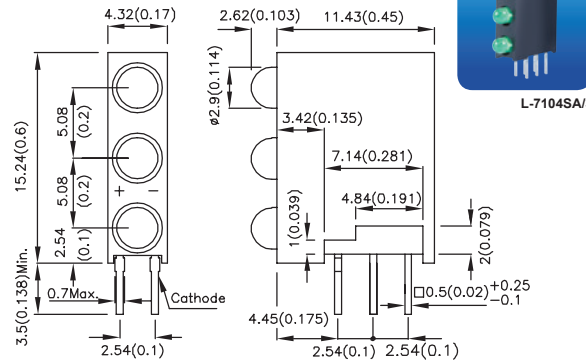
NOTES:

1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.
3. Luminous intensity value is traceable to CIE127-2007 standards.

BI-LEVEL CBI

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @10mA		Viewing Angle 2 θ 1/2	Dimensions
				Min.	Typ.		
L-1503EB/111YD	GaAsP/GaP	617	red diffused	12	40	30°	<p>T-1 3/4 (5mm) Bi-Level</p>  <p>L-1503EB/2</p>
	GaAsP/GaP	588	yellow diffused	15	30	30°	
L-1503EB/1G1XD	GaP	568	green diffused	15	30	30°	<p>L-1503EB/1G1XD</p> 
L-1503EB/2GD	GaP	568	green diffused	15	30	30°	


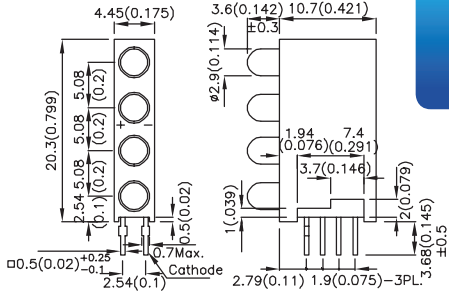




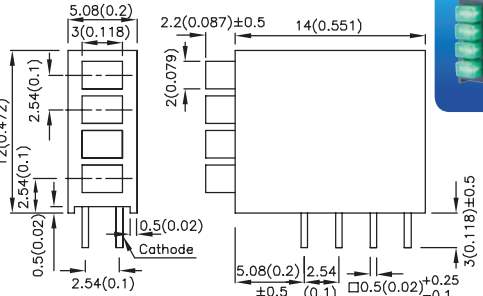

TRI-LEVEL CBI

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @10mA *20mA		Viewing Angle 2 θ 1/2	Dimensions
				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°	
L-7104SA/2G1ID	GaP	568	green diffused	10	25	50°	
	GaAsP/GaP	617	red diffused	10	20	50°	<p>T-1 (3mm) Tri-Level</p>  <p>L-7104SA/3</p>
L-7104SA/ 1SR1SAK1CGKD	GaAlAs	640	red diffused	*50	*100	50°	
	AlGaInP	590	amber Diffused	*400	*800	50°	
L-7104SA/3GD	GaP	568	green diffused	10	25	50°	

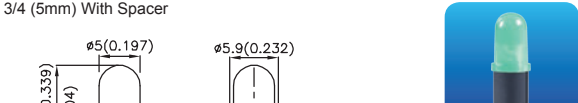
NOTES:

1. All dimensions are in millimeters(inches).
2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.
3. Luminous intensity value is traceable to CIE127-2007 standards.

QUAD-LEVEL CBI

Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @10mA		Viewing Angle	Dimensions
				Min.	Typ.		
L-7104SB/1G1Y1G1YD	GaP	 568	green diffused	10	25	50°	T-1 (3mm) Quad-Level   L-7104SB/4
	GaAsP/GaP	 588	yellow diffused	8	15	50°	
L-7104SB/4GD	GaP	 568	green diffused	10	25	50°	
L-914CK/4GDT	GaP	 568	green diffused	3	6	140°	2mm x 3mm Quad-Level   L-914CK/4

WITH SPACER

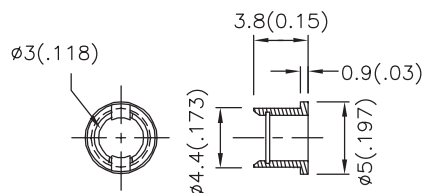
Part Number	Material	λ_D (nm)	Lens Type	Iv (mcd) @10mA		Viewing Angle	Dimensions
				Min.	Typ.		
L-7113BR-9.52/ID L-7113BR-12.7/ID	GaAsP/GaP	617	red diffused	18	40	30°	T-1 3/4 (5mm) With Spacer  L-7113BR-9.52/xxx (Dim. A : 9.52) L-7113BR-12.7/xxx (Dim. A : 12.7)
L-7113BR-9.52/YD L-7113BR-12.7/YD	GaAsP/GaP	588	yellow diffused	10	25	30°	
L-7113BR-9.52/GD L-7113BR-12.7/GD	GaP	568	green diffused	15	30	30°	

SMD CBI[illegible]

NOTES:

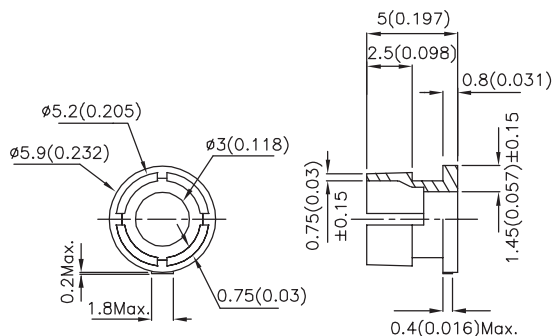
- NOTES:
1. All dimensions are in millimeters(inches).
 2. Tolerance is $\pm 0.25\text{mm}(0.01")$ unless otherwise noted.
 3. Luminous intensity value is traceable to CIE127-2007 standards.

RTC-31



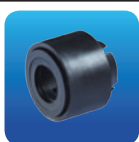
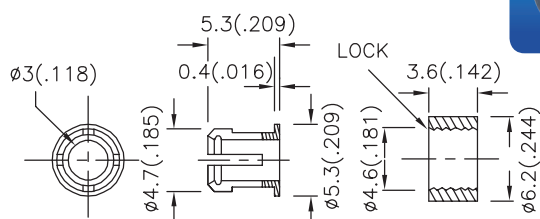
RTC-31

CB-30



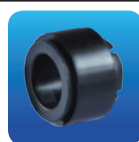
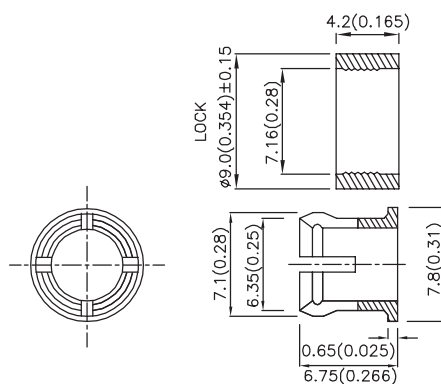
CB-30

RTC-32



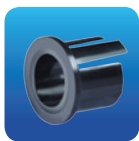
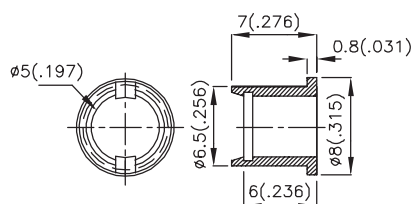
RTC-32

CB-50



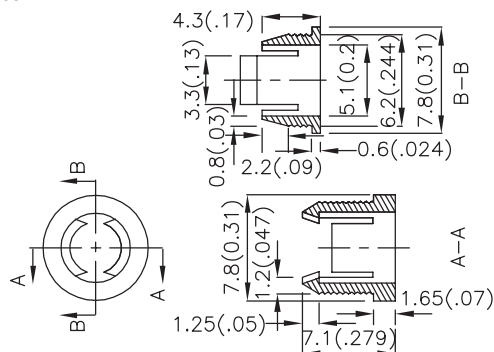
CB-50

RTC-51



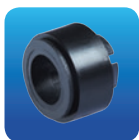
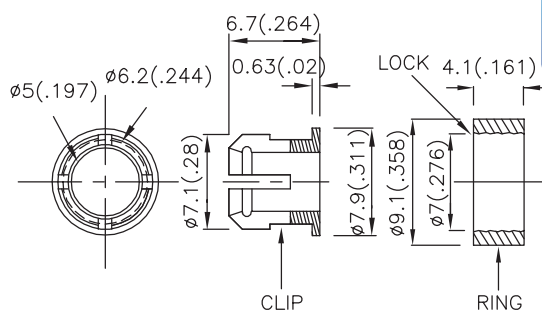
RTC-51

CB-55



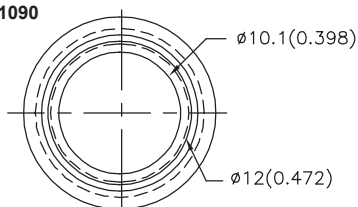
CB-55

RTC-52

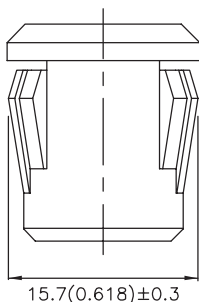
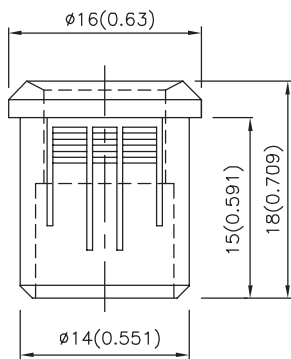


RTC-52

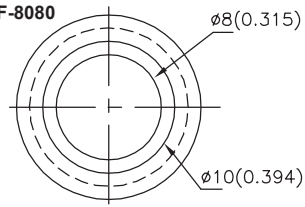
RTF-1090



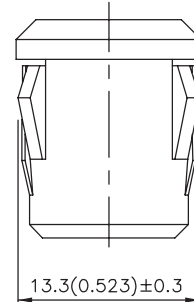
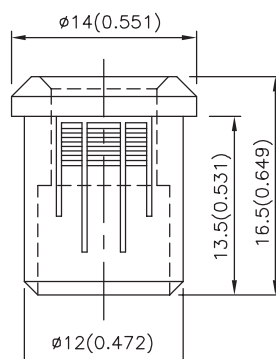
RTF-1090



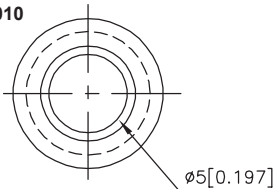
RTF-8080



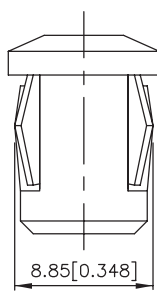
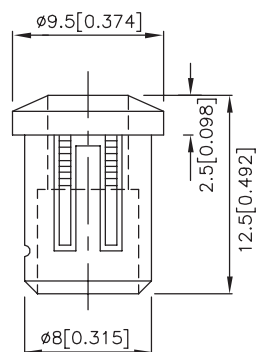
RTF-8080



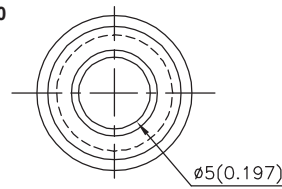
RTF-5010



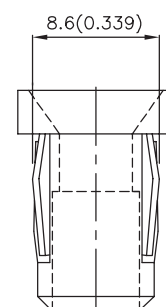
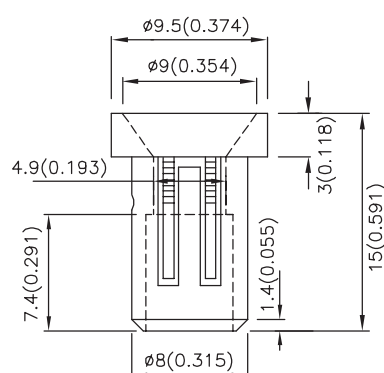
RTF-5010



RTF-5020

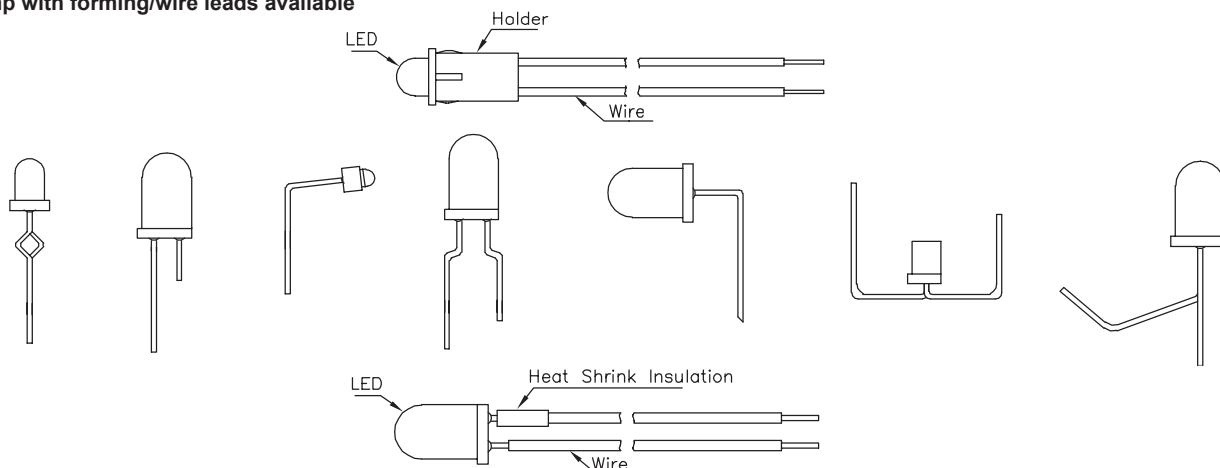


RTF-5020



VALUE ADDED LED LAMPS

LED lamp with forming/wire leads available



NOTES:

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