

Circuit Board Indicator, 2mm Tri-Level LED CBI

BL-LA3D2-A1005

■ FEATURES

- 1.8mm LED CBI, Tri level
- Tri-level CBI configuration for compact multi-position indication
- Slim 1.8mm LED package optimized for tight panel spacing
- Pre-formed leads ensure accurate PCB alignment across all levels
- Black housing for enhanced contrast and clear ON/OFF visibility
- High-reliability LED chip with stable luminous output
- UL 94V-0 rated PA66 housing
- Halogen-free and RoHS compliant



■ APPLICATIONS

- Miniature status indicators
- Multi-status panel displays (three-step indicators)
- Instrumentation and control panel stacks
- Compact display modules and signal towers
- Space-constrained equipment requiring multiple light points
- Portable or handheld device indicators

■ ATTENTION

This device is sensitive to electrostatic discharge.

Use appropriate ESD handling procedures during assembly.

■ Electrical-optical characteristics: (Ta=25°C) (Test Condition: IF=20mA)

Color Code	Single LED Color	Chip			Lens Type	Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:mcd		Viewing Angle 2θ1/2 (deg)
		Emitted Color	Material	λP (nm)		Typ	Max	Min.	Typ.	
E	Mono color	amber	AlGaAs	610	Color Diffused	1.85	2.2	30	110	60
R	Mono color	Red	GaAsP/GaP	635	Color Diffused	2.1	2.5	10	70	60
Y	Mono color	Yellow	GaAsP/GaP	585	Color Diffused	2.1	2.5	1.5	20	60
G	Mono color	Green	GaP/GaP	570	Color Diffused	2.2	2.5	1.5	20	60
B	Mono color	Blue	InGaN	465	Color Diffused	2.2	2.5	1.5	20	60
W	Mono color	White	InGaN	-	Color Diffused	3.1	4.2	300	700	60
YG	Bi-color	Yellow	GaAsP/GaP	585	Color Diffused	2.1	2.5	1.5	20	60
		Green	GaP/GaP	570	Color Diffused	2.2	2.5	1.5	20	60
GB	Bi-color	Green	GaP/GaP	570	Color Diffused	2.2	2.5	1.5	20	60
		Blue	InGaN	465	Color Diffused	2.2	2.5	1.5	20	60
GE	Bi-color	Green	GaP/GaP	570	Color Diffused	2.2	2.5	1.5	20	60
		amber	AlGaAs	610	Color Diffused	1.85	2.2	30	110	60
RY	Bi-color	Red	GaAsP/GaP	635	Color Diffused	2.1	2.5	10	70	60
		Yellow	GaAsP/GaP	585	Color Diffused	2.1	2.5	1.5	20	60
GR	Bi-color	Green	GaP/GaP	570	Color Diffused	2.2	2.5	1.5	20	60
		Red	GaAsP/GaP	635	Color Diffused	2.1	2.5	10	70	60

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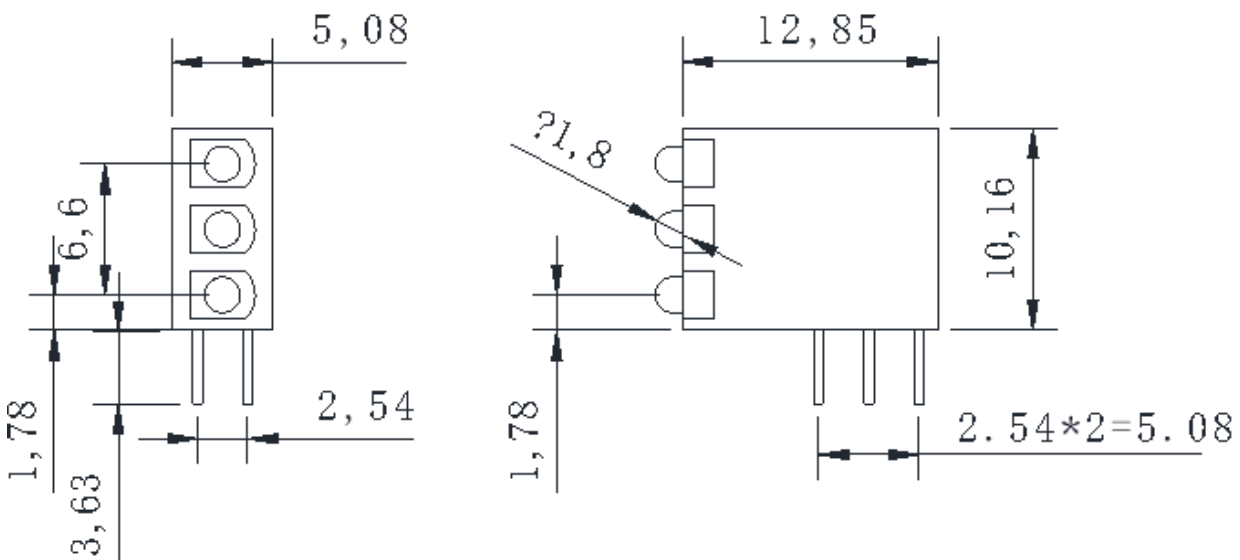
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■ Absolute maximum ratings (Ta=25°C)

Parameter	R	E	Y	G	B	W	Unit
Forward Current I_F	25	25	25	30	30	30	mA
Power Dissipation P_d	60	60	60	65	120	120	mW
Reverse Voltage V_R	5	5	5	5	5	5	V
Peak Forward Current I_{PF} (Duty 1/10 @1KHZ)	150	150	150	150	100	100	mA
Operation Temperature T_{OPR}	-40 to +80						°C
Storage Temperature T_{STG}	-40 to +85						°C
Lead Soldering Temperature T_{SOL}	Max.260±5°C for 3 sec Max. (1.6mm from the base of the epoxy bulb)						°C

■ Package configuration & Internal circuit diagram

BL-LA3D2-A1005 Series



Notes:

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

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■ Product Select Guide

Part No	LED 1	LED 2	LED 3
BL-LA3D3-A1504BBB	B	B	B
BL-LA3D3-A1504BEG	B	E	G
BL-LA3D3-A1504BGE	B	G	E
BL-LA3D3-A1504BGG	B	G	G
BL-LA3D3-A1504BGR	B	G	R
BL-LA3D3-A1504BGY	B	G	Y
BL-LA3D3-A1504BYG	B	Y	G
BL-LA3D3-A1504EEB	E	E	B
BL-LA3D3-A1504EEE	E	E	E
BL-LA3D3-A1504EEG	E	E	G
BL-LA3D3-A1504EG-EG-EG	EG	EG	EG
BL-LA3D3-A1504EGY	E	G	Y
BL-LA3D3-A1504ERE	E	R	E
BL-LA3D3-A1504ERG	E	R	G
BL-LA3D3-A1504EYG	E	Y	G
BL-LA3D3-A1504GBB	G	B	B
BL-LA3D3-A1504GBE	G	B	E
BL-LA3D3-A1504GBR	G	B	R
BL-LA3D3-A1504GBY	G	B	Y
BL-LA3D3-A1504GEB	G	E	B
BL-LA3D3-A1504GEE	G	E	E
BL-LA3D3-A1504GG-RG-RG	GG	RG	RG
BL-LA3D3-A1504GG-YG-YG	GG	YG	YG
BL-LA3D3-A1504GGB	G	G	B
BL-LA3D3-A1504GGE	G	G	E
BL-LA3D3-A1504GGG	G	G	G
BL-LA3D3-A1504GGR	G	G	R
BL-LA3D3-A1504GGX	G	G	X
BL-LA3D3-A1504GGY	G	G	Y
BL-LA3D3-A1504GRB	G	R	B
BL-LA3D3-A1504GRE	G	R	E
BL-LA3D3-A1504GRG	G	R	G
BL-LA3D3-A1504GRR	G	R	R
BL-LA3D3-A1504GRX	G	R	X
BL-LA3D3-A1504GRY	G	R	Y
BL-LA3D3-A1504GXB	G	X	B
BL-LA3D3-A1504GXE	G	X	E
BL-LA3D3-A1504GXG	G	X	G
BL-LA3D3-A1504GXR	G	X	R
BL-LA3D3-A1504GXX	G	X	X
BL-LA3D3-A1504GXY	G	X	Y
BL-LA3D3-A1504GYB	G	Y	B
BL-LA3D3-A1504GYG	G	Y	G

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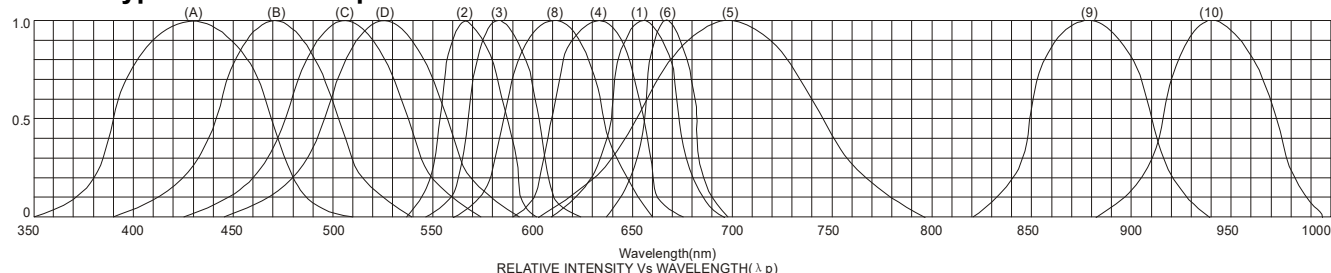
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BL-LA3D3-A1504GYR	G	Y	R
BL-LA3D3-A1504GYX	G	Y	X
BL-LA3D3-A1504GYY	G	Y	Y
BL-LA3D3-A1504REY	R	E	Y
BL-LA3D3-A1504RG-RG-RG	RG	RG	RG
BL-LA3D3-A1504RG-RG-X	RG	RG	X
BL-LA3D3-A1504RGB	R	G	B
BL-LA3D3-A1504RGG	R	G	G
BL-LA3D3-A1504RGR	R	G	R
BL-LA3D3-A1504RGX	R	G	X
BL-LA3D3-A1504RGY	R	G	Y
BL-LA3D3-A1504RRG	R	R	G
BL-LA3D3-A1504RRR	R	R	R
BL-LA3D3-A1504RRY	R	R	Y
BL-LA3D3-A1504RXG	R	X	G
BL-LA3D3-A1504RXR	R	X	R
BL-LA3D3-A1504RXX	R	X	X
BL-LA3D3-A1504RYG	R	Y	G
BL-LA3D3-A1504RYG	R	Y	G
BL-LA3D3-A1504RYR	R	Y	R
BL-LA3D3-A1504RYR	R	Y	R
BL-LA3D3-A1504YYY	R	Y	Y
BL-LA3D3-A1504WWB	W	W	B
BL-LA3D3-A1504WWW	W	W	W
BL-LA3D3-A1504XGG	X	G	G
BL-LA3D3-A1504XGX	X	G	X
BL-LA3D3-A1504XRR	X	R	R
BL-LA3D3-A1504XRX	X	R	X
BL-LA3D3-A1504XXG	X	X	G
BL-LA3D3-A1504YG-YG-YG	YG	YG	YG
BL-LA3D3-A1504YGG	Y	G	G
BL-LA3D3-A1504YGR	Y	G	R
BL-LA3D3-A1504YGX	Y	G	X
BL-LA3D3-A1504YGY	Y	G	Y
BL-LA3D3-A1504YRG	Y	R	G
BL-LA3D3-A1504YRR	Y	R	R
BL-LA3D3-A1504YRX	Y	R	X
BL-LA3D3-A1504YXG	Y	X	G
BL-LA3D3-A1504YXX	Y	X	X
BL-LA3D3-A1504YXY	Y	X	Y
BL-LA3D3-A1504YYG	Y	Y	G
BL-LA3D3-A1504YYR	Y	Y	R
BL-LA3D3-A1504YYX	Y	Y	X
BL-LA3D3-A1504YYY	Y	Y	Y

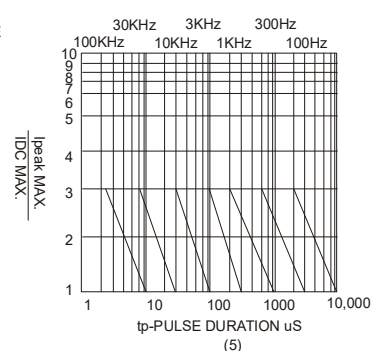
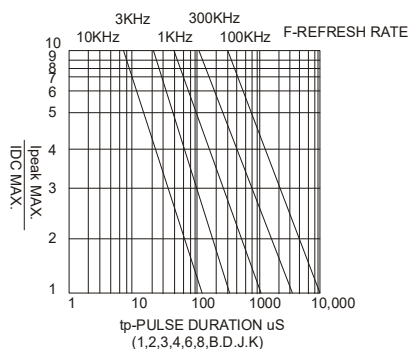
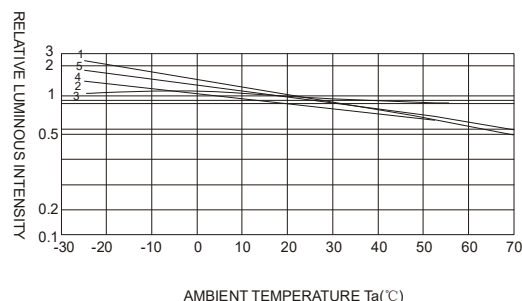
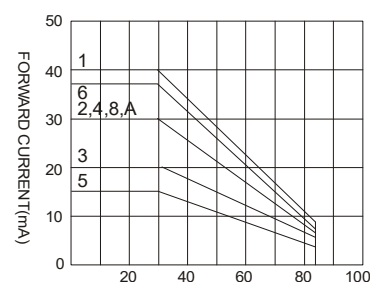
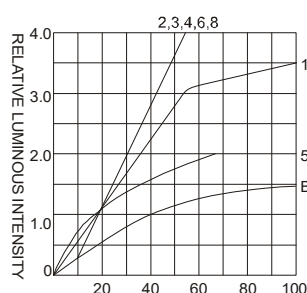
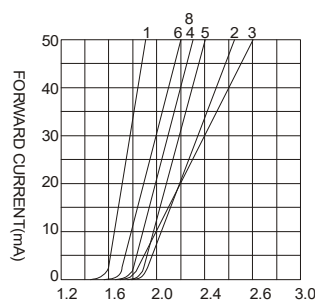
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Typical electrical-optical characteristics curves:



- | | |
|---|--------------------------------------|
| (1) - GaAsP/GaAs 655nm/Red | (9) - GaAlAs 880nm |
| (2) - GaP 570nm/Yellow Green | (10) - GaAs/GaAs & GaAlAs/GaAs 940nm |
| (3) - GaAsP/GaP 585nm/Yellow | (A) - GaN/SiC 430nm/Blue |
| (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red | (B) - InGaN/SiC 470nm/Blue |
| (5) - GaP 700nm/Bright Red | (C) - InGaN/SiC 505nm/Ultra Green |
| (6) - GaAlAs/GaAs 660nm/Super Red | (D) - InGaAl/SiC 525nm/Ultra Green |
| (8) - GaAsP/GaP 610nm/Super Red | |



NOTE: 25°C free air temperature unless otherwise specified

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■ **Packing and weighting**

