

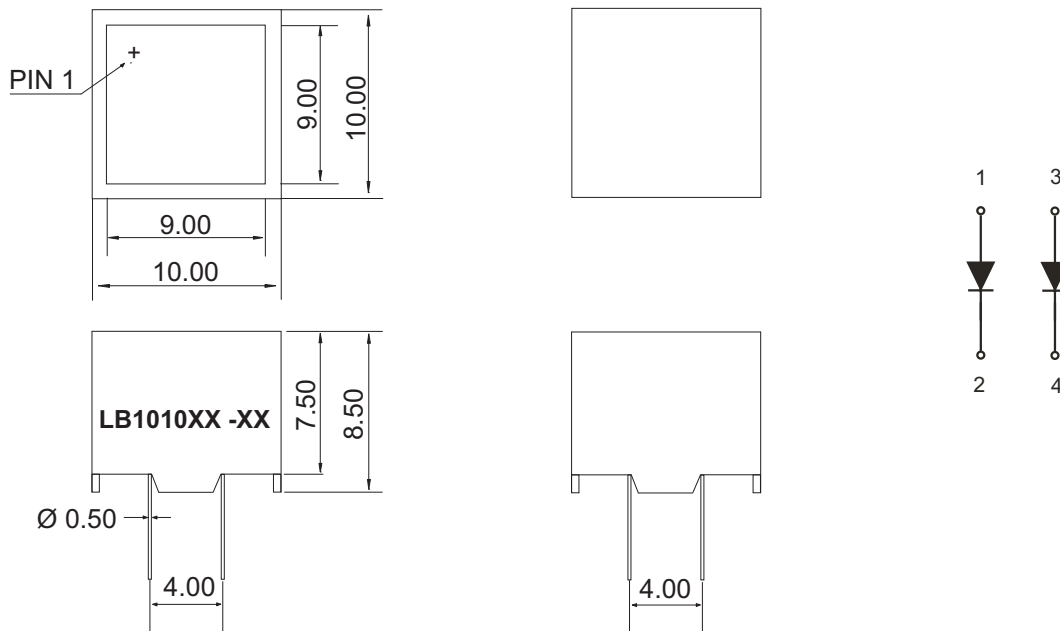
**DESCRIPTION**

- 10\*10\*8.50mm Square Light Bar
- Standard Brightness
- Low Current Operation
- Excellent Character Appearance
- Easy Mounting on PC Boards or Sockets



**Package Dimensions & Internal Circuit Diagram**

LB 1010 xx Series



Notes:

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

**Absolute Maximum Ratings ( Ta = 25°C )**

Parameter	Symbol	Test Condition	Value		Unit
			Min	Max	
Reverse Voltage	V <sub>R</sub>	IR= 30μA	5	-----	V
Forward Current	I <sub>f</sub>	-----	-----	20	mA
Power Dissipation	P <sub>d</sub>	-----	-----	100	mW
Pulse Current	I <sub>peak</sub>	Duty = 0.1ms, 1KHz	-----	150	mA
Operating Temperature	T <sub>opr</sub>	-----	- 40	+85	°C
Storage Temperature	T <sub>str</sub>	-----	- 40	+85	°C

XX :Surface / Epoxy Color :

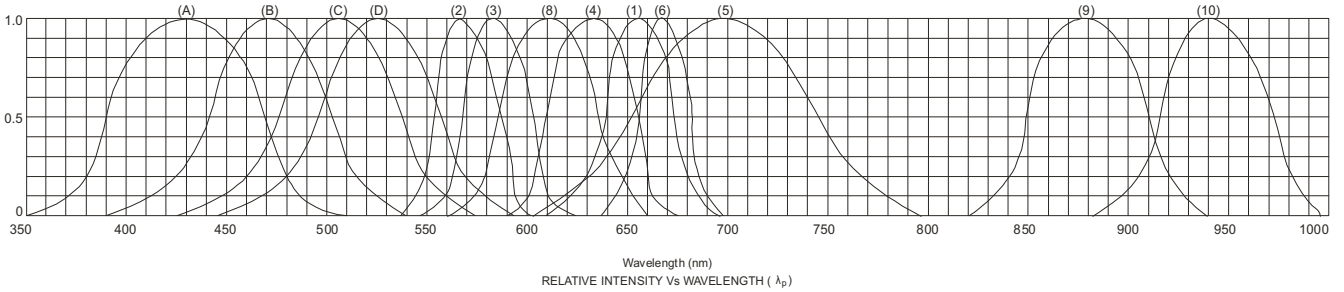
<b>Surface Color</b> Number	White 0	Black 1	Gray 2	Red 3	4	5
<b>Epoxy Color</b> Number	White Diffused 0	Red Diffused 1	Green Diffused 2	Yellow Diffused 3	Blue Diffused 4	Water Clear 5

**Description :**

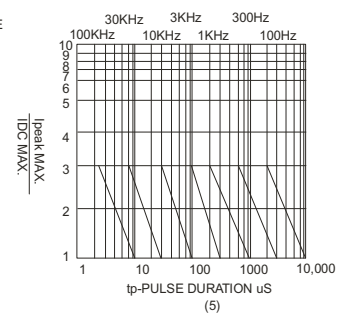
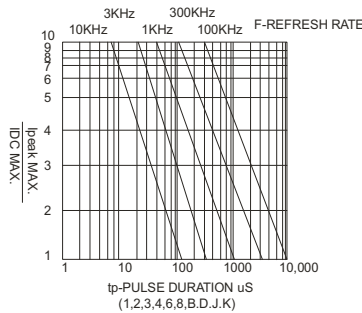
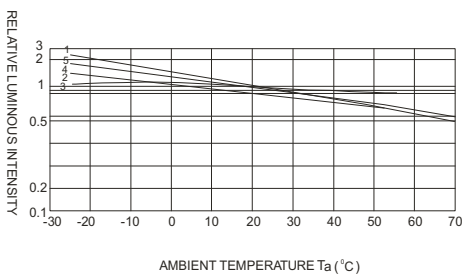
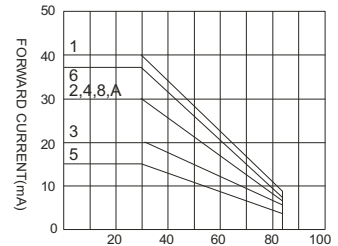
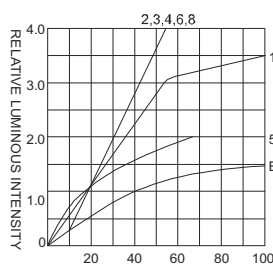
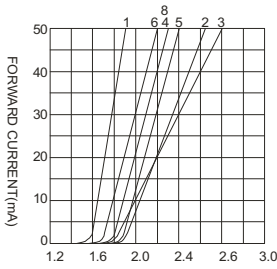
Color Code & Chip Characteristics: ( Test Condition:  $I_f = 20\text{mA}$  )

Color	Die Material	Peak Wave Length ( $\lambda_p$ )	Spectral Line Half Width ( $\Delta \lambda_{1/2}$ )	Forward Voltage (Vf) per Seg		Luminous Intensity (Iv) Unit : mcd	
				Typ	Max		
H	Hi Red	AlGaAs, SH	660nm	20nm	1.80	2.20	15-20
D	Super Red	AlGaAs,DH	660nm	20nm	1.80	2.20	20-30
LR	Ultra Red	AlGaAs,DDH	660nm	20nm	1.90	2.40	26-38
HR	HE Red	GaAsP	640nm	45nm	1.90	2.40	50-80
E	Orange	GaAsP	630nm	35nm	2.10	2.50	40-80
S	Super Red	AlGalnp	630nm	20nm	2.10	2.50	30-40
<b>ULTRA BRIGHT</b>							
UH R	Ultra Hi Red	AlGalnP	645nm	20nm	2.10	2.50	80-150
UE	Ultra Orange	AlGalnP	630nm	20nm	2.10	2.50	180-210
UA	Ultra Amber	AlGalnP	610nm	20nm	2.10	2.50	90-120
UY	Ultra Yellow	AlGalnP	590nm	20nm	2.10	2.50	60-100
UG	Ultra Green	AlGalnP	570nm	30nm	2.20	2.50	60-100
UPG	Ultra Pure Green	InGaN	520nm	36nm	2.80	3.80	260-310
UB	Ultra Blue	InGaN	470nm	30nm	2.80	3.80	80-90
W	White	InGaN	X=0.29, Y=0.30		2.80	3.80	180-200
Segment to Segment Luminous Intensity ratio (Iv-M) 1.5: 1							

## Part NO.: LB1010 XX - XX



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



NOTE: 25°C free air temperature unless otherwise specified