

SMD LED LAMP

BL-LS0603XX

Features:

- Ø 1.6mmx0.8mm SMD, 0.8mm THICKNESS
- Ø Mono-color type
- Ø Compatible with automatic placement equipment
- Ø WIDE VIEWING ANGLE.
- Ø IDEAL FOR BACKLIGHT AND INDICATOR.
- Ø PACKAGE: 4KPCS/REEL
- Ø RoHs Compliance



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

Part Number	Chip			Lens Type	Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:mcd		Viewing Angle 2θ/2 (deg)
	Emitted Color	Material	λp f (nm)		Typ	Max	Min.	Typ.	
					BL-LS0603HC	Red	GaP	700	
BL-LS0603SRC	Super Red	AlGaAs	660	1.85	2.30	5	13		
BL-LS0603LRC	Super Red	AlGaAs	660	1.85	2.30	10	28		
BL-LS0603URC	Ultra Red	AlGaAs	660	1.95	2.50	20	45		
BL-LS0603EC	Orange	GaAsP	640	2.10	2.70	1	6		
BL-LS0603YC	Yellow	GaAsP	583	2.15	2.70	1	6		
BL-LS0603GC	Green	GaP	568	2.30	2.70	6	15		

Absolute maximum ratings (Ta=25°C)

Parameter	H	SR	LR	UR	E	Y	G	Unit
Forward Current I _F	30	30	30	30	30	30	30	mA
Power Dissipation P _d	65	78	78	78	65	65	65	mW
Reverse Voltage V _R	5	5	5	5	5	5	5	V
Peak Forward Current I _{PF} (Duty 1/10 @1KHZ)	100	100	100	100	100	100	100	mA
Operation Temperature T _{OPR}	-30 to +80							°C
Storage Temperature T _{STG}	-40 to +85							°C
Lead Soldering Temperature T _{SOI}	Max.260±5°C for 3 sec Max. (1.6mm from the base of the epoxy bulb)							°C

SMD LED LAMP
BL-LS0603XX
Electrical-optical characteristics: (Ta=25°C) (Test Condition: IF=20mA)

Part Number	Chip			Lens Type	Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:mcd		Viewing Angle 2θ/2 (deg)
	Emitted Color	Material	λ _P (nm)		Typ	Max	Min.	Typ.	
					BL-LS0603UDR	Ultra Red	AlGaAs	655	
BL-LS0603UHR	Ultra Red	AlGaAs	645	Water Clear	2.10	2.60	30	80	130
BL-LS0603UEC	Ultra Orange	AlGaAs	630		2.10	2.50	30	80	
BL-LS0603UHD	Ultra Orange	AlGaAs	618		2.10	2.60	50	110	
BL-LS0603UYO	Ultra Amber	AlGaInP	610		2.10	2.60	30	80	
BL-LS0603UYC	Ultra Yellow	AlGaInP	593		2.10	2.60	25	70	
BL-LS0603UGC	Ultra Green	AlGaInP	575		2.20	2.70	10	40	
BL-LS0603PGC	Ultra Pure Green	InGaN	525		3.50	4.20	50	100	
BL-LS0603BGC	Ultra Bluish Green	InGaN	505		3.50	4.20	50	110	
BL-LS0603DNB	Blue	InGaN	470		3.50	4.20	10	33	
BL-LS0603UBC	Ultra Blue	InGaN	470		3.50	4.20	10	30	
BL-LS0603UWC	Ultra White	InGaN	/		3.50	4.20	40	200	

Absolute maximum ratings (Ta=25°C)

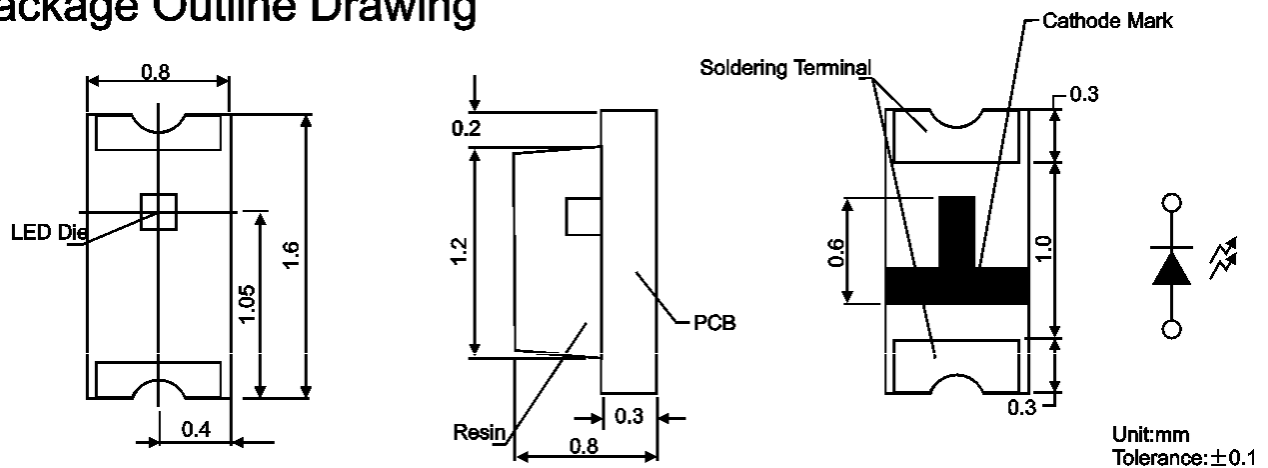
Parameter	UDR	UHR	UE	UHD	UYO	UY	UG	PG	BG	DNB	UB	UW	Unit
Forward Current I _F	30	30	30	30	30	30	30	30	30	30	30	30	mA
Power Dissipation P _d	78	78	78	78	78	78	78	78	78	78	78	78	mW
Reverse Voltage V _R	5	5	5	5	5	5	5	5	5	5	5	5	V
Peak Forward Current I _{PF} (Duty 1/10 @1KHZ)	100	100	100	100	100	100	100	100	100	100	100	100	mA
Operation Temperature T _{OPR}	-30 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

SMD LED LAMP

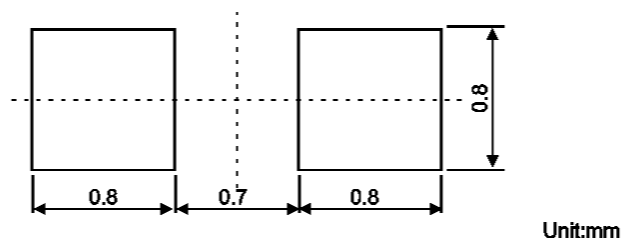
BL-LS0603XX

Package configuration & Internal circuit diagram

**BL-LS0603 Series
Package Outline Drawing**



Recommended Soldering Pad Dimensions



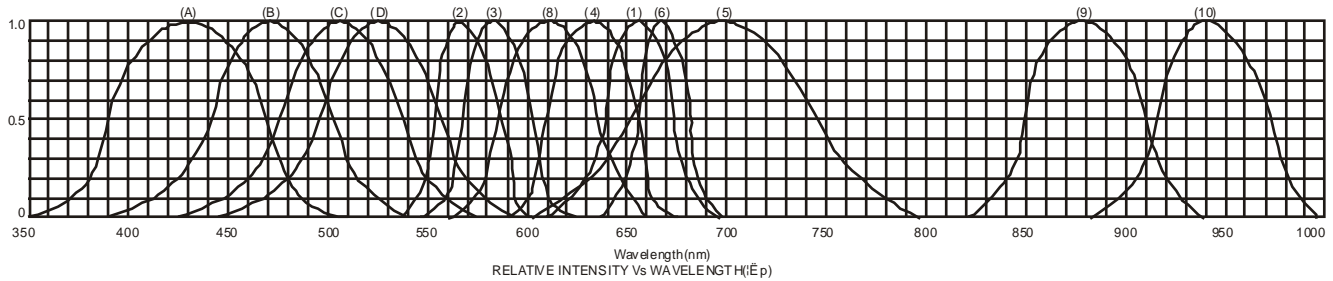
Notes:

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.

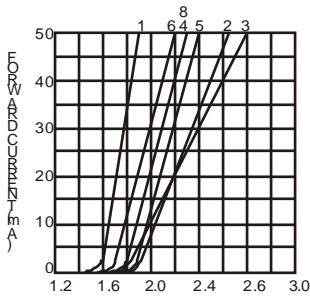
SMD LED LAMP

BL-LS0603XX

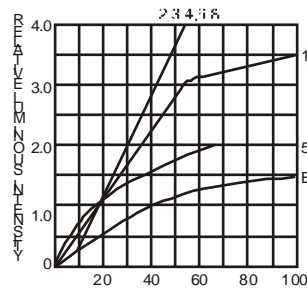
Typical electrical-optical characteristics curves:



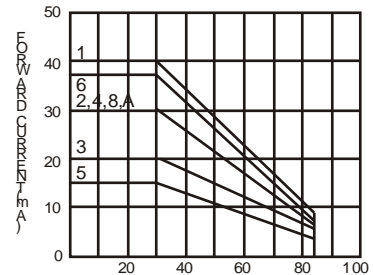
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) -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



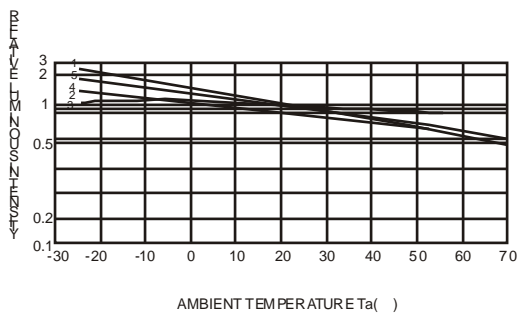
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



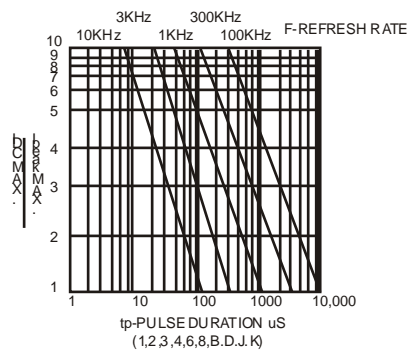
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



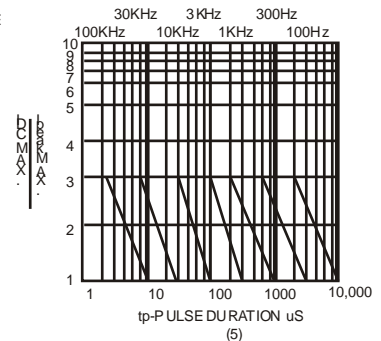
AMBIENT TEMPERATURE Ta (°C)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta (°C)



tp-PULSE DURATION μ s
(1,2,3,4,6,8,B,D,J,K)



tp-PULSE DURATION μ s
(5)

NOTE:25 free air temperature unless otherwise specified

SMD LED LAMP

BL-LS0603XX

Packing and weighting

