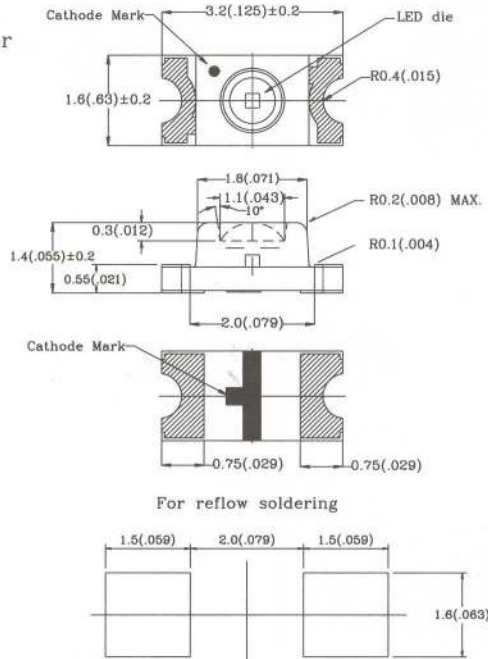


# SURFACE MOUNT CHIP LED LAMPS

## 1206 Inner Lens BL-Hxxx3A Series



Anode Mark For  
 BL-HSxx3A  
 BL-HDxx3A  
 BL-HFxx3A



NOTE:  
 1. All dimensions are in millimeters (inches).  
 2. Tolerance is  $\pm 0.10(.004)$  unless otherwise specified.  
 3. Specifications are subject to change without notice.

Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

	UNIT	SPEC.
IF	mA	30
IFp	mA	100
VR	V	5
Topr	$^\circ\text{C}$	-25~+80
Tstg	$^\circ\text{C}$	-30~+85

Part No.	Chip				Lens Appearance	Electro-optical Data (At 20mA)				Viewing Angle $2\theta_{1/2}$ (deg)
	Material	Emitted Color	$\lambda_p$ (nm)	$\lambda_d$ (nm)		Vf(V)		Iv(mcd)		
						Typ.	Max.	Min.	Typ.	
BL-HE133A	GaAsP/GaP	Hi-Eff Red	640	628	Water Clear	2.0	2.6	5.5	15.0	60
BL-HS133A	GaAlAs/GaAs	Super Red	660	643		1.7	2.6	12.3	25.0	
BL-HD033A	GaAlAs/GaAs	Super Red	660	643		1.8	2.6	28.0	60.0	
BL-HF033A	GaAlAs	Super Red	660	643		2.1	2.6	42.0	90.0	
BL-HUB33A	AlGaInP	Super Red	645	632		2.1	2.6	63.0	100.0	
BL-HJB33A	AlGaInP	Super Orange Red	620	615		2.0	2.6	94.0	160.0	
BL-HJD33A	AlGaInP	Super Orange Red	630	625		2.1	2.6	94.0	160.0	
BL-HG033A	GaP/GaP	Yellow Green	568	571		2.1	2.6	12.3	25.0	
BL-HX133A	GaP/GaP	Hi-Eff Green	568	570		2.2	2.6	12.3	40.0	
BL-HW133A	GaP/GaP	Pure Green	557	563		2.2	2.6	3.7	8.0	
BL-HGD33A	AlGaInP	Super Yellow Green	570	570		2.0	2.6	28.0	65.0	
BL-HG433A	InGaN	Bluish Green	505	505		3.5	4.0	94.0	150.0	
BL-HG633A	InGaN	Green	525	525		3.5	4.0	140.0	300.0	
BL-HY033A	GaAsP/GaP	Yellow	583	585		2.1	2.6	5.5	15.0	
BL-HKB33A	AlGaInP	Super Yellow	590	587		2.1	2.6	94.0	200.0	
BL-HKD33A	AlGaInP	Super Yellow	595	594		2.1	2.6	94.0	200.0	
BL-HA133A	GaAsP/GaP	Amber	610	610		2.2	2.6	5.5	12.0	
BL-HJF33A	AlGaInP	Super Amber	610	605		2.0	2.6	94.0	160.0	