

We Tame Photons to Work for You!



Products > LEDs > Thru-Hole > Round > 3mm > Standard



### Features / Options

- ▶ State-of-the-Art, High Brightness Chip Technology
- ▶ Choice of Colors and Lens Finishes
- ▶ Lead Frame / Lens Casting Reliability
- ▶ Easy-to-Solder Leads, Tin Finish
- ▶ Available Bulk or on Tape and Reel
- ▶ Lead Trimming and Forming Available
- ▶ Custom Shapes, Easily Tooled, Low Minimum

### Applications / Uses

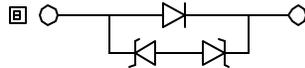
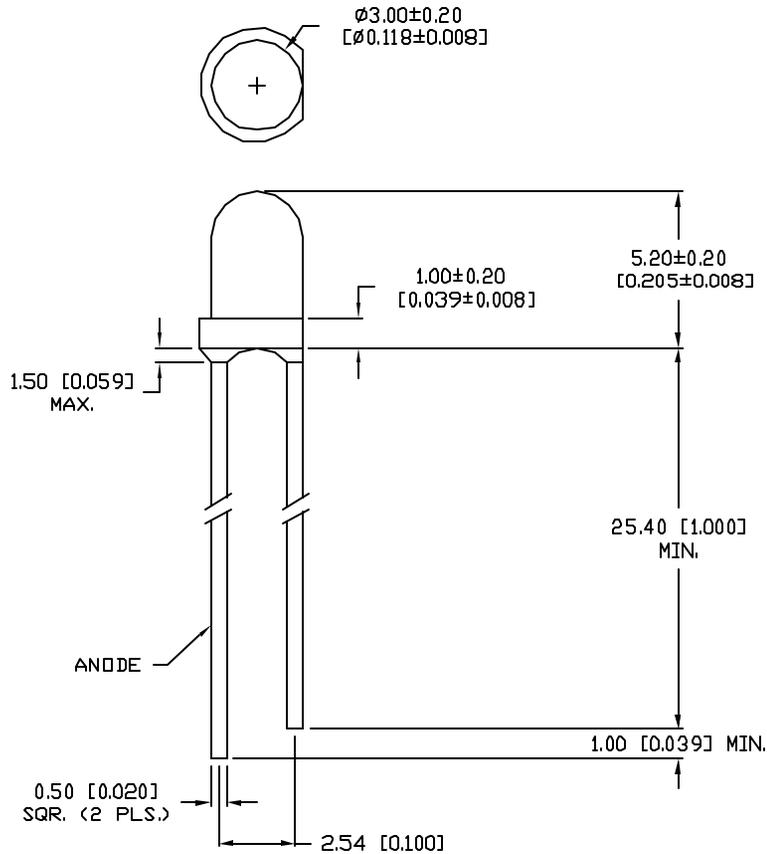
- ▶ Board or Panel Indication or Illumination
- ▶ Annunciator and Control Panels
- ▶ Telecom Switches and Central Station Equipment
- ▶ Large Panel Indicators

Part Number:	Brightness	Dice Material	Emitted Color	Peak Wavelength	Epoxy Lens	Operating Typ Vf (V)	Intensity Typ, mcd @ 20 mA	View Angle 2x Theta		
SSL-LX3054AC	STANDARD	GaAsP	Amber	605	Clear	2.1	80	30		—
SSL-LX3054AD	STANDARD	GaAsP	Amber	605	Diffused	2.1	30	60		—
SSL-LX3054AT	HIGH	AllnGaP	Amber	610	Color Tinted	2.1	80	30		—
SSL-LX3054GC	STANDARD	GaP	Green	565	Clear	2.1	50	30		—
SSL-LX3054GD	STANDARD	GaP	Green	565	Diffused	2.1	12	60		—
SSL-LX3054GT	STANDARD	GaP	Green	565	Color Tinted	2.1	50	30		—
SSL-LX3054HC	STANDARD	GaP	Red	700	Clear	2.0	30	30		—
SSL-LX3054HD	STANDARD	GaP	Red	700	Diffused	2.0	3	60		—
SSL-LX3054IC	STANDARD	GaAsP	Red	635	Clear	2.0	60	30		—
SSL-LX3054ID	STANDARD	GaAsP	Red	635	Diffused	2.0	40	60		—

SSL-LX3054IGW		STANDARD	GaAsP	Red/Green	635	White Diffused	2	30	60		—
SSL-LX3054IT		STANDARD	GaAsP	Red	635	Color Tinted	2	45	30		—
SSL-LX3054OC		STANDARD	GaP	Orange	630	Clear	2.1	50	30		—
SSL-LX3054OD		STANDARD	GaP	Orange	630	Diffused	2.1	25	60		—
SSL-LX3054PGC		STANDARD	GaP	Green	555	Clear	2.1	20	30		—
SSL-LX3054PGD		STANDARD	GaP	Green	555	Diffused	2.1	10	60		—
SSL-LX3054PGT		STANDARD	GaP	Green	555	Color Tinted	2.1	20	30		—
SSL-LX3054SIC		HIGH	AlInGaP	Red	636	Clear	2.0	100	30		—
SSL-LX3054SID		HIGH	AlInGaP	Red	696	Diffused	2.0	100	20		—
SSL-LX3054SOC		HIGH	AlInGaP	Orange	610	Clear	2.0	2500	30		—
SSL-LX3054SOD		HIGH	AlInGaP	Orange	610	Diffused	2.0	100	60		—
SSL-LX3054SRC		STANDARD	GaAlAs	Red	660	Clear	1.7	300	30		—
SSL-LX3054SRD		STANDARD	GaAlAs	Red	660	Diffused	1.7	80	60		—
SSL-LX3054SUGC		HIGH	AlInGaP	Green	574	Clear	2.2	1000	30		—
SSL-LX3054SUGD		HIGH	AlInGaP	Green	574	Diffused	2.2	60	60		—
SSL-LX3054SYC		HIGH	AlInGaP	Yellow	590	Clear	2.0	1000	30		—
SSL-LX3054SYD		HIGH	AlInGaP	Yellow	590	Diffused	2.0	250	60		—
SSL-LX3054USBC		HIGH	InGaN	Blue	470	Clear	3.5	1000	30		—
SSL-LX3054USBD		HIGH	InGaN	Blue	470	Diffused	3.5	80	60		—
SSL-LX3054UWC/A		HIGH	InGaN	White	-	Clear	3.5	750	20		—
SSL-LX3054UWC/B		HIGH	InGaN	White	-	Clear	3.5	900	20		—
SSL-LX3054YC		STANDARD	GaAsP	Yellow	585	Clear	2.1	90	30		—
SSL-LX3054YD		STANDARD	GaAsP	Yellow	585	Diffused	2.1	30	60		—
SSL-LX3054YT		STANDARD	GaAsP	Yellow	585	Color Tinted	2.1	90	30		—

UNCONTROLLED DOCUMENT

PART NUMBER		REV.
SSL-LX3054UWC/A		B
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10509./	4-27-99
B	E.C.N. #11283.	1.6.06



⊠ ELECTRO-OPTICAL CHARACTERISTICS  $T_A=25^\circ\text{C}$

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH			550 (WHITE)		nm	
FORWARD VOLTAGE	$V_f$		3.8	4.0	V	$I_f=20\text{mA}$
REVERSE VOLTAGE	$V_r$	5			V	$I_r=10\mu\text{A}$
AXIAL INTENSITY(*1)	$I_v$		750		mcd	$I_f=20\text{mA}$
CHROMATICITY	X		0.29			$I_f=10\text{mA}$
COORDINATES(*2)	Y		0.30			
VIEWING ANGLE			40		2x theta	
EMITTED COLOR:	WHITE					
EPOXY LENS FINISH:	WATER CLEAR					

\*1. AXIAL INTENSITY TESTING CONDITION: 550nm WAVELENGTH.  
\*2. THE ICI STANDARD COLORIMETRIC SYSTEM.

LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	SYMBOL	MAX	UNITS
PULSE FORWARD CURRENT	$I_p$	100*	mA
STEADY CURRENT	$I_f$	30	mA
POWER DISSIPATION	$P_D$	120	mW
OPERATING TEMP.	$T_{OPR}$	-30 TO +80	°C
STORAGE TEMP.	$T_{STG}$	-40 TO +100	°C
SOLDERING TEMP.		+260	°C
2.0mm FROM BODY			3 SEC. MAX

\*DUTY 1/10 PULSE WIDTH 10ms

CAUTION: STATIC SENSITIVE DEVICE  
FOLLOW PROPER E.S.D. HANDLING PROCEDURES  
WHEN WORKING WITH THIS PART.



UNCONTROLLED DOCUMENT

\*UNLESS OTHERWISE SPECIFIED TOLERANCE IS  $\pm 0.25\text{mm}$  ( $\pm 0.010''$ )

REV. B	PART NUMBER SSL-LX3054UWC/A	<p>CONFIDENTIAL INFORMATION</p> <p>THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.</p> <p>RELIABILITY NOTE</p> <p>OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.</p>	<p><b>LUMEX</b> INCORPORATED</p>
T-3mm (T-1) ULTRA WHITE LED, WATER CLEAR LENS.		<p>DRAWN BY: CK/DU</p>	<p>CHECKED BY:</p> <p>APPROVED BY:</p> <p>DATE: 9-4-98 PAGE: 1 OF 1 SCALE: N/A</p>