

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		—

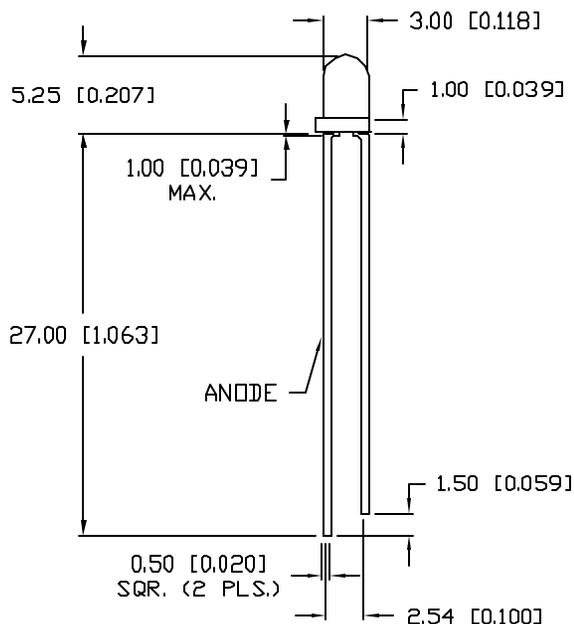
SSL-LX3054IGW		STANDARD	GaAsP	Red/Green	635	White Diffused	2	30	60		—
SSL-LX3054IT		STANDARD	GaAsP	Red	635	Color Tinted	2	45	30		—
SSL-LX3054OC		STANDARD	GaP	Orange	630	Clear	2.1	50	30		—
SSL-LX3054OD		STANDARD	GaP	Orange	630	Diffused	2.1	25	60		—
SSL-LX3054PGC		STANDARD	GaP	Green	555	Clear	2.1	20	30		—
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		—

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PART NUMBER  
SSL-LX3054YD

REV.  
B

REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	REDRAWN.	11.23.99
B	E.C.N. #10BRDR. & REDRAWN IN 3D.	4.5.01



ELECTRO-OPTICAL CHARACTERISTICS  $T_A=25^\circ\text{C}$   $I_f=20\text{mA}$

PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		585		nm	
FORWARD VOLTAGE		2.1	2.5	$V_f$	
REVERSE VOLTAGE	5.0			$V_r$	$I_f=100\mu\text{A}$
AXIAL INTENSITY		30		mcd	$I_f=20\text{mA}$
VIEWING ANGLE		60		2x theta	
EMITTED COLOR:	YELLOW				
EPOXY LENS FINISH:	YELLOW DIFFUSED				

LIMITS OF SAFE OPERATION AT  $25^\circ\text{C}$

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	150	mA
STEADY CURRENT	30	mA
POWER DISSIPATION	105	mW
DERATE FROM $25^\circ\text{C}$	-1.6	mW/ $^\circ\text{C}$
OPERATING, STORAGE TEMP.	-40 TO +85	$^\circ\text{C}$
SOLDERING TEMP.	+260	$^\circ\text{C}$
2.0mm FROM BODY		3 SEC. MAX

\*  $t < 10\mu\text{s}$

\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), XX=±0.5 (±0.020), XXX=±0.25 (±0.010), XXXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= <sup>+DECIMAL PRECISION</sup>-0.00 MAX.= <sup>+0.00</sup>-DECIMAL PRECISION

UNCONTROLLED DOCUMENT

REV. B	PART NUMBER SSL-LX3054YD
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T-3mm (T-1) 585nm YELLOW LED,  
YELLOW DIFFUSED LENS.

**RELIABILITY NOTE**  
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.

DRAWN BY: BC	CHECKED BY:	APPROVED BY:	DATE: 8.9.94 PAGE: 1 OF 1 SCALE: N/A
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