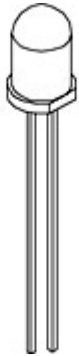


We Tame Photons to Work for You!



Products > LEDs > Thru-Hole > Round > 5mm > Standard > High Intensity



Features / Options

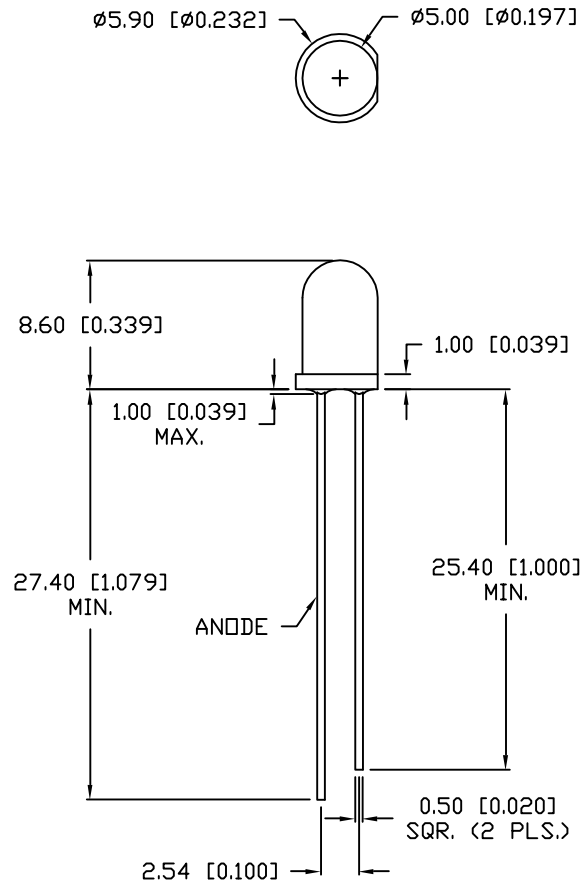
- ▶ State-of-the-Art, High Brightness Chip Technology
- ▶ Choice of Colors and Lens Finishes
- ▶ Lead Frame / Lens Casting Reliability
- ▶ Easy-to-Solder Leads, Tin Finish
- ▶ Available Bulk or on Tape and Reel
- ▶ Lead Trimming and Forming Available
- ▶ Custom Shapes, Easily Tooled, Low Minimum

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-LX5093PC	HIGH	InGaN	Pink	-	Clear	3.5	2200	20	—
SSL-LX5093PGD	STANDARD	GaP	Green	555	Diffused	2.1	30	60	—
SSL-LX5093PGT	STANDARD	GaP	Green	555	Color Tinted	2.0	50	30	—
SSL-LX5093SIC	HIGH	AllnGaP	Red	636	Clear	2.0	1800	30	—
SSL-LX5093SID	HIGH	AllnGaP	Red	636	Diffused	2.0	700	60	—
SSL-LX5093SOC	HIGH	AllnGaP	Orange	610	Clear	2.0	2500	30	—
SSL-LX5093SOD	HIGH	AllnGaP	Orange	610	Diffused	2.0	850	60	—
SSL-LX5093SRC/DU	STANDARD	GaAlAs	Red	660	Clear	1.7	1300	30	—
SSL-LX5093SRC/DV	STANDARD	GaAlAs	Red	660	Clear	1.7	1600	30	—
SSL-LX5093SRC/DW	STANDARD	GaAlAs	Red	660	Clear	1.7	2000	30	—

SSL-LX5093SRC/E		STANDARD	GaAlAs	Red	660	Clear	1.7	3500	30		—
SSL-LX5093SUGC		HIGH	AlInGaP	Green	574	Clear	2.2	1000	30		—
SSL-LX5093SUGD		HIGH	AlInGaP	Green	574	Diffused	2.2	170	60		—
SSL-LX5093SYC		HIGH	AlInGaP	Yellow	590	Clear	2.0	1000	30		—
SSL-LX5093SYD		HIGH	AlInGaP	Yellow	590	Diffused	2.0	300	60		—
SSL-LX5093TC		HIGH	InGaN	Turquoise	-	Clear	3.5	2200	20		—
SSL-LX5093UEGC		HIGH	InGaN	Green	505	Clear	3.5	1500	30		—
SSL-LX5093UPGC/C		HIGH	InGaN	Green	525	Clear	4.0	4500	20		—
SSL-LX5093UPGC/D		HIGH	InGaN	Green	525	Clear	3.7	14000	20		—
SSL-LX5093UPGD/D		HIGH	InGaN	Green	525	Diffused	3.5	2800	60		—
SSL-LX5093USBC		HIGH	InGaN	Blue	470	Clear	3.5	1000	30		—
SSL-LX5093USBD		HIGH	InGaN	Blue	470	Diffused	3.5	300	60		—
SSL-LX5093UWC/A		HIGH	InGaN	White	-	Clear	3.5	900	20		—
SSL-LX5093UWC/G		HIGH	InGaN	White	-	Clear	3.5	11000	20		—
SSL-LX5093UWW		HIGH	InGaN	White	-	Diffused	3.5	800	20		—
SSL-LX5093VC		HIGH	InGaN	Purple	-	Clear	3.5	2200	20		—



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

PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		470		nm	
FORWARD VOLTAGE		3.5	4.0	V_f	
REVERSE VOLTAGE	5.0			V_r	$I_r=100\mu\text{A}$
AXIAL INTENSITY		1000		mcd	$I_f=20\text{mA}$
VIEWING ANGLE		30		2x theta	
EMITTED COLOR:	BLUE				
EPOXY LENS FINISH:	WATER CLEAR				

LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	100	mA
STEADY CURRENT	30	mA
POWER DISSIPATION	105	mW
DERATE FROM 25°C	-1.2	$\text{mW}/^\circ\text{C}$
OPERATING, STORAGE TEMP.	-40 TO +85	$^\circ\text{C}$
SOLDERING TEMP.	+260	$^\circ\text{C}$
2.0mm FROM BODY		3 SEC. MAX

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

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

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

REV.

PART NUMBER
SSL-LX5093USBC

T-5mm (T-1) 470nm ULTRA SUPER BLUE LED,
WATER CLEAR LENS.

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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.

LUMEX
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DRAWN BY: CHECKED BY: APPROVED BY: DATE: 8.18.00

BC

PAGE: 1 OF 1

SCALE: N/A