



We Tame Photons to Work for You!



Products > High Power LEDs > AstraLED

Features / Options

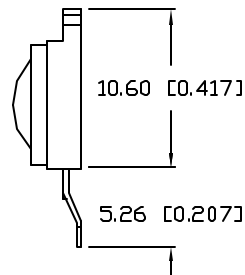
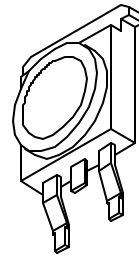
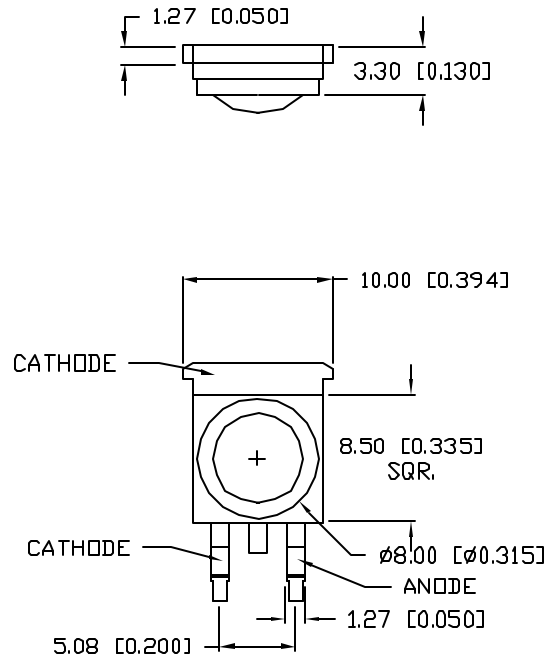
Applications / Uses



- ▶ State-of-the-Art, High Brightness Chip Technology
- ▶ Choice of Colors and Lens Finishes
- ▶ Easy-to-Solder Leads, Tin Finish
- ▶ SMT package eliminates thru-hole soldering
- ▶ Very Long Operational Life

- ▶ LCD Backlighting
- ▶ Illuminating Signs/Artwork
- ▶ Decorative Lighting
- ▶ Warning and Alarm Lights

Part Number:	Brightness	Dice Material	Emitted Color	Peak Wavelength	Epoxy Lens	Operating Typ Vf (V)	Intensity Typ, mcd @ 20 mA	View Angle 2x Theta		
SML-LX1610SIC	HIGH	AlInGaP	Red	625	Clear	2.1	22 lm	70	n/a	—
SML-LX1610SIC/A	HIGH	AlInGaP	Red	625	Clear	2.1	22 lm	110	n/a	—
SML-LX1610SYC	HIGH	AlInGaP	Yellow	590	Clear	2.1	22 lm	70	n/a	—
SML-LX1610SYC/A	HIGH	AlInGaP	Yellow	590	Clear	2.1	22 lm	110	n/a	—
SML-LX1610UPGC	HIGH	InGaN	Green	525	Clear	3.5	25 lm	70	n/a	—
SML-LX1610UPGC/A	HIGH	InGaN	Green	525	Clear	3.5	25 lm	110	n/a	—
SML-LX1610USBC	HIGH	InGaN	Blue	470	Clear	3.5	5 lm	70	n/a	—
SML-LX1610USBC/A	HIGH	InGaN	Blue	470	Clear	3.5	5 lm	110	n/a	—
SML-LX1610UWC	HIGH	InGaN	White	-	Clear	3.5	30 lm	70	n/a	—
SML-LX1610UWC/A	HIGH	InGaN	White	-	Clear	3.5	30 lm	110	n/a	—



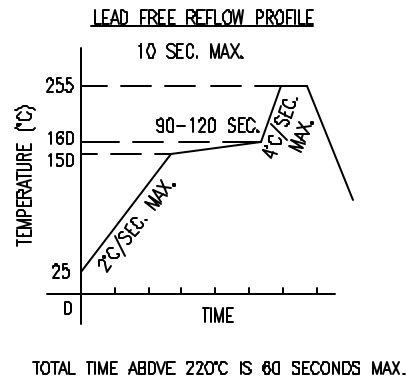
ELECTRO-OPTICAL CHARACTERISTICS $T_A=25^{\circ}\text{C}$ $I_f=350\text{mA}$

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH			525		nm	
FORWARD VOLTAGE	V_f		4	2	V	$I_f=350\text{mA}$
REVERSE VOLTAGE	V_r	5			V	$I_f=10\mu\text{A}$
AXIAL INTENSITY(*1)	I_v		25		lm	$I_f=350\text{mA}$
VIEWING ANGLE			70		2x theta	
EMITTED COLOR:			GREEN			
EPOXY LENS FINISH:			WATER CLEAR			

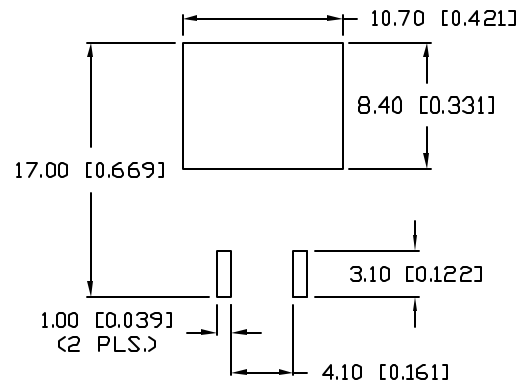
LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	SYMBOL	MAX	UNITS
PULSE FORWARD CURRENT	I_p	500	mA
STEADY CURRENT	I_F	350	mA
POWER DISSIPATION	P_D	1.5	W
OPERATING TEMP.	T_{OPR}	-20 TO +70	°C
STORAGE TEMP.	T_{STG}	-40 TO +85	°C

*DUTY 1/10 PULSE WIDTH 10ms



SOLDER PAD LAYOUT



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



NOTES:

1. 50 PCS. IN EACH TUBE.

*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.=^{+0.00}/_{-0.00} MAX.=^{+0.00}/_{-0.00} DECIMAL PRECISION

REV.

PART NUMBER

SML-LX1610UPGC

CONFIDENTIAL INFORMATION

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.



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.

10.60 x 10mm HIGH POWER LED, 525nm GREEN LED.

DRAWN BY:

JD

CHECKED BY:

APPROVED BY:

DATE: 8.31.06

PAGE: 1 OF 1

SCALE: N/A