



We Tame Photons to Work for You!



Products > LEDs > Surface Mount > Ceramic > 0805 Package

### Features / Options

### Applications / Uses

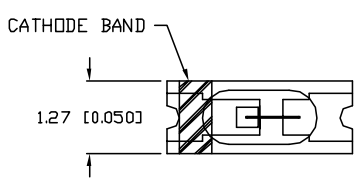


- ▶ State-of-the-Art, High Brightness Chip Technology
- ▶ Choice of Colors and Lens Finishes
- ▶ Lead Frame / Lens Casting Reliability
- ▶ Easy-to-Solder Leads, Tin Finish
- ▶ Available Bulk or on Tape and Reel
- ▶ Lead Trimming and Forming Available
- ▶ Custom Shapes, Easily Tooled, Low Minimum

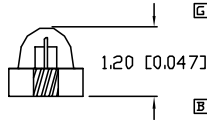
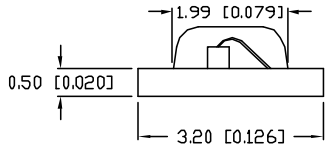
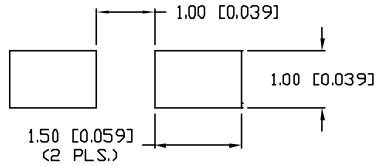
- ▶ Board or Panel Indication or Illumination
- ▶ Annunciator and Control Panels
- ▶ Telecom Switches and Central Station Equipment
- ▶ Large Panel Indicators

Part Number:	Brightness	Dice Material	Emitted Color	Peak Wavelength	Epoxy Lens	Operating Typ Vf (V)	Intensity Typ, mcd @ 20 mA	View Angle 2x Theta		
CCL-LX45GT	STANDARD	GaP	Green	565	Color Tinted	2.2	7.0	180		—
CCL-LX45IT	STANDARD	GaAsP	Red	635	Color Tinted	2.1	7.2	180		—
CCL-LX45SRT	STANDARD	GaAlAs	Red	660	Color Tinted	1.8	8.0	180		—
CCL-LX45YT	STANDARD	GaAsP	Yellow	585	Color Tinted	2.3	7.0	180		—

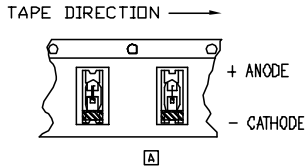
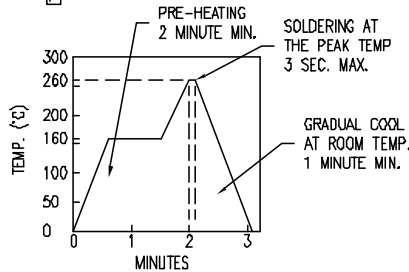
UNCONTROLLED DOCUMENT



SOLDER PAD LAYOUT



REFLOW SOLDER CHART



PART NUMBER		REV.
CCL-LX45IT		
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	ADDED TAPE AND REEL SPEC./	11-20-95
B	E.C.N. #10105./	12-18-95
C	E.C.N. #10143./	4-8-96
D	E.C.N. #10176./	5-30-96
E	E.C.N. #10BRDR. & REDRAWN.	11-9-98
F	E.C.N. #10511./ ADDED SOLDER CHART.	4-28-99
G	E.C.N. #10524./ CHANGED HEIGHT.	6-17-99
H	E.C.N. #11148.	12.04.06

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

PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		635 (RED)		nm	
FORWARD VOLTAGE		2.1	2.5	V <sub>f</sub>	
REVERSE VOLTAGE	5.0			V <sub>r</sub>	I <sub>f</sub> =100μA
AXIAL INTENSITY		7.2		mcd	I <sub>f</sub> =20mA
VIEWING ANGLE		180		2x theta	
EMITTED COLOR:	RED				
EPOXY LENS FINISH:	RED TRANSPARENT				

LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	800	mA
STEADY CURRENT	30	mA
POWER DISSIPATION	130	mW
DERATE FROM 25°C	-2.4	mW/°C
OPERATING TEMP.	-30 TO +80	°C
STORAGE TEMP.	-40 TO +120	°C

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

\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.038), 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= -0.00, +DECIMAL PRECISION MAX= +0.00 -DECIMAL PRECISION

UNCONTROLLED DOCUMENT

REV.	PART NUMBER CCL-LX45IT	<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>	
	CERAMIC CHIP, SURFACE MOUNT LED, RED TRANSPARENT, TAPE AND REEL.		<p>DRAWN BY: JC</p> <p>CHECKED BY:</p> <p>APPROVED BY:</p> <p>DATE: 11.20.95 PAGE: 1 OF 1 SCALE: N/A</p>