



Products > LEDs > Surface Mount > OctoLED 1505 Package



Features / Options

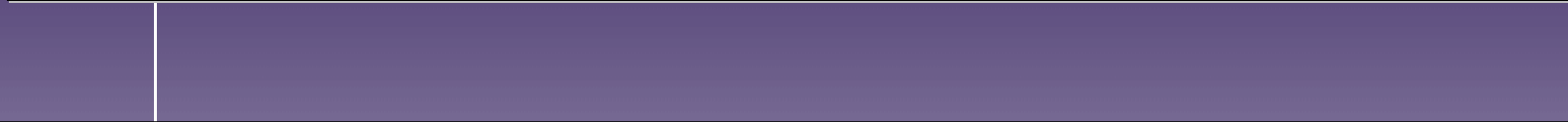
- ▶ State-of-the-Art, High Brightness Chip Technology
- ▶ Choice of Colors and Lens Finishes
- ▶ Lead Frame / Lens Casting Reliability
- ▶ Easy-to-Solder Leads, Tin Finish
- ▶ Available Bulk or on Tape and Reel
- ▶ Lead Trimming and Forming Available
- ▶ Custom Shapes, Easily Tooled, Low Minimum

Applications / Uses

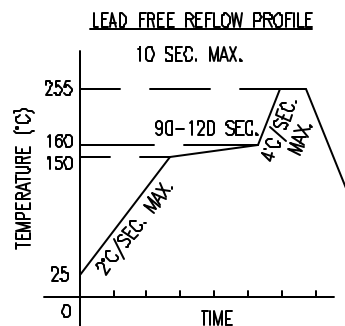
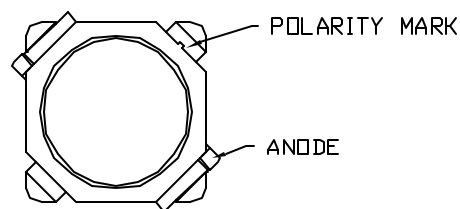
- ▶ Board or Panel Indication or Illumination
- ▶ Annunciator and Control Panels
- ▶ Telecom Switches and Central Station Equipment
- ▶ Large Panel Indicators

Part Number:		Brightness	Dice Material	Emitted Color	Peak Wavelength	Epoxy Lens	Operating Typ Vf (V)	Intensity Typ, mcd @ 20 mA	View Angle 2x Theta		
SML-H1505SIC-TR		HIGH	AlInGaP	Red	635	Clear	2.0	700	60		—
SML-H1505SID-TR		HIGH	AlInGaP	Red	635	Diffused	2.0	460	65		—
SML-H1505SIUPGUSBC		HIGH	AlInGaP/InGaN/InGaN	RGB	635/525/470	Clear	2.0/3.4/3.4	1100/600/2200	70		—
SML-H1505SIUPGUSBW		HIGH	AlInGaP/InGaN/InGaN	RGB	635/525/470	Milky	2.0/3.4/3.4	1100/600/2200	60		—
SML-H1505SOC-TR		HIGH	AlInGaP	Amber	610	Clear	2.0	1500	68		—
SML-H1505SOD-TR		HIGH	AlInGaP	Amber	610	Diffused	2.0	1000	75		—
SML-H1505SUGC-TR		HIGH	AlInGaP	Green	574	Clear	2.2	200	68		—
SML-H1505SUGD-TR		HIGH	AlInGaP	Green	574	Diffused	2.2	200	75		—
SML-H1505SYC-TR		HIGH	AlInGaP	Yellow	590	Clear	2.0	750	60		—
SML-H1505SYD-TR		HIGH	AlInGaP	Yellow	590	Diffused	2.0	460	70		—
SML-H1505UPGC-TR		HIGH	InGaN	Green	525	Clear	3.4	7000	45		—

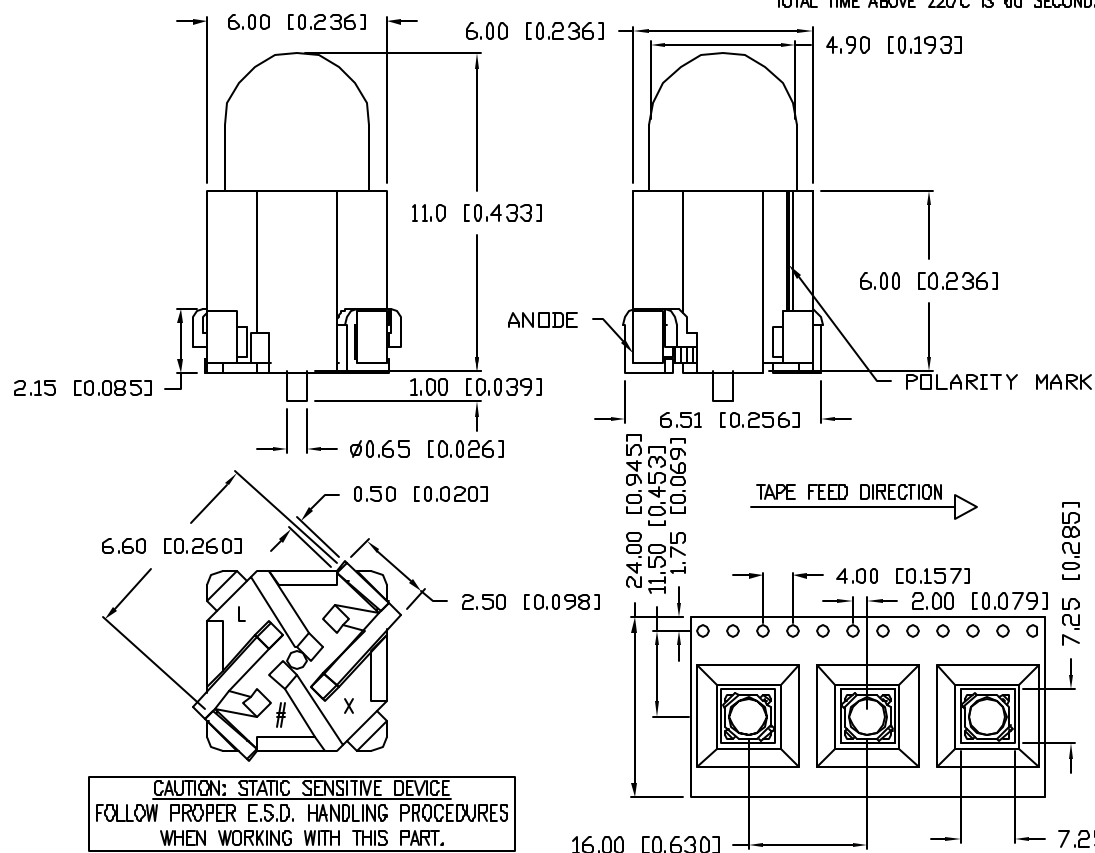
SML-H1505UPGD-TR		HIGH	InGaN	Green	525	Diffused	3.4	2200	60		—
SML-H1505USBC-TR		HIGH	InGaN	Blue	470	Clear	3.4	2500	40		—
SML-H1505USBD-TR		HIGH	InGaN	Blue	470	Diffused	3.4	1600	40		—
SML-H1505UWC-TR		HIGH	InGaN	White	-	Clear	3.3	14000	30		—
SML-H1505UWW-TR		HIGH	InGaN	White	-	Milky	3.3	3000	40		—



* PATENT PENDING



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.



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), 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=+DECIMAL PRECISION -0.00, MAX.=+0.00 -DECIMAL PRECISION

PART NUMBER
SML-H1505USBC-TR

REV.

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

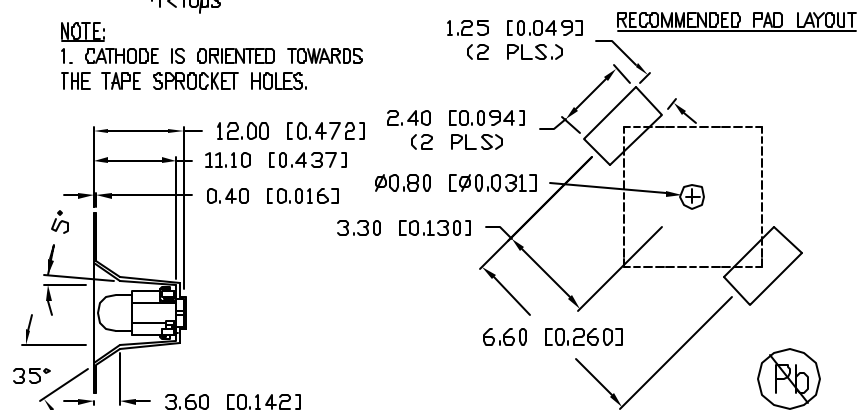
PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		470		nm	
FORWARD VOLTAGE		3.3	4.0	V _f	
REVERSE VOLTAGE	5.0			V _r	$I_f=100\mu\text{A}$
AXIAL INTENSITY	1400	2500		mcd	$I_f=20\text{mA}$
VIEWING ANGLE		40		2x theta	
EMITTED COLOR:	BLUE				
EPOXY LENS FINISH:	WATER CLEAR				

LIMITS OF SAFE OPERATION AT 25°C PER DIE

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT*	100	mA
STEADY CURRENT	20	mA
POWER DISSIPATION	80	mW
DERATE FROM 25°C	-1.2	mW/°C
OPERATING TEMP.	-30 TO +80	°C
STORAGE TEMP.	-40 TO +100	°C
SOLDERING TEMP.	+260	°C
2.0mm FROM BODY	5 SEC. MAX	

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

NOTE:
1. CATHODE IS ORIENTED TOWARDS
THE TAPE SPROCKET HOLES.



UNCONTROLLED DOCUMENT

REV.

PART NUMBER

SML-H1505USBC-TR

5mm SURFACE MOUNTED DOME LED,
470nm ULTRA SUPER BLUE LED, WATER CLEAR.

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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.



DRAWN BY:

JN

CHECKED BY:

APPROVED BY:

DATE: 04.25.08

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SCALE: N/A