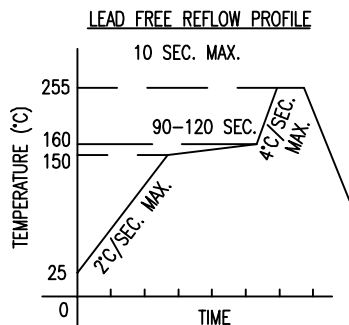
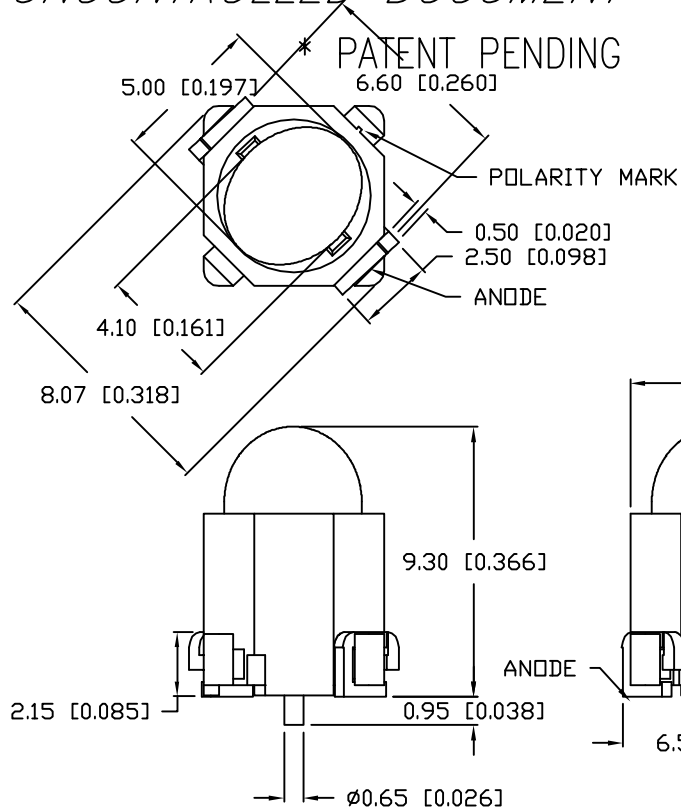


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TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.

*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

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

PART NUMBER		REV.
SML-H150E5SID/1		A
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #11599.	11.18.09

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

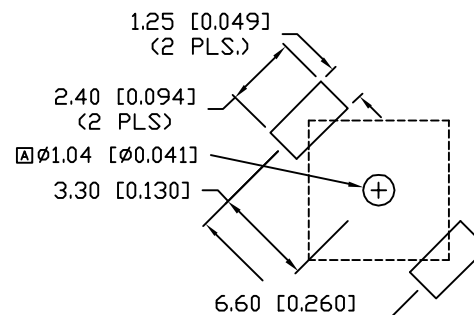
PARAMETER	MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH		635		nm	
FORWARD VOLTAGE		2.1	2.5	V_f	
REVERSE VOLTAGE	5.0			V_r	$I_r=100\mu\text{A}$
AXIAL INTENSITY*	2200		5400	mcd	$I_f=20\text{mA}$
VIEWING ANGLE (X)		60		2x theta	
VIEWING ANGLE (Y)		35		2x theta	
EMITTED COLOR:	RED				
EPOXY LENS FINISH:	RED DIFFUSED				

LIMITS OF SAFE OPERATION AT 25°C PER DIE

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT**	100	mA
STEADY CURRENT	35	mA
POWER DISSIPATION	90	mW
DERATE FROM 25°C	-1.2	mW/°C
OPERATING TEMP.	-30 TO +80	°C
STORAGE TEMP.	-40 TO +100	°C

**1/10 DUTY CYCLE, 0.1ms PULSE WIDTH

RECOMMENDED PAD LAYOUT



*AXIAL INTENSITY BINS

BIN	INTENSITY@20mA	
	MIN (mcd)	MAX (mcd)
1	2200	2750
2	2750	3440
3	3440	4300
4	4300	5400

UNCONTROLLED DOCUMENT

REV.
APART NUMBER
SML-H150E5SID/15X4mm ELLIPTICAL SURFACE MOUNTED DOME LED,
635nm RED LED, RED DIFFUSED.

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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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			SCALE: N/A

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* PATENT PENDING

PART NUMBER

SML-H150E5SID/1

REV.

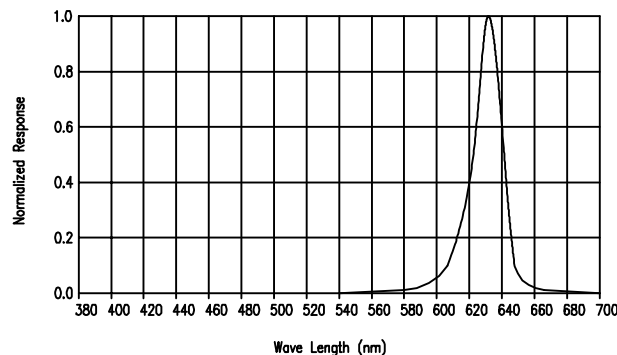
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REV. E.C.N. NUMBER AND REVISION COMMENTS

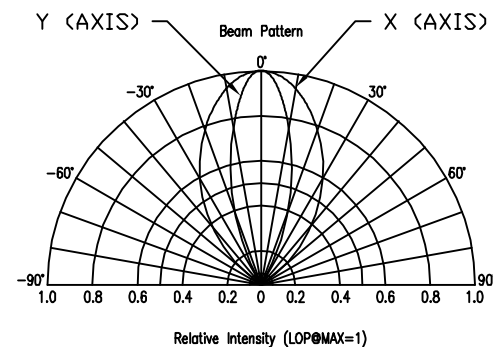
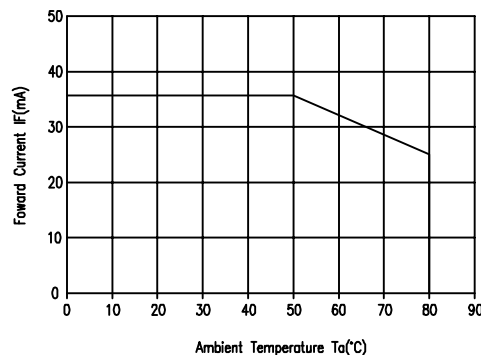
DATE

SEE PAGE 1.

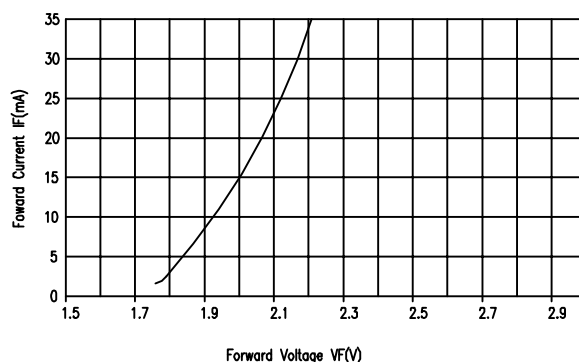
Spectral Radiance (Peak @ 635nm)



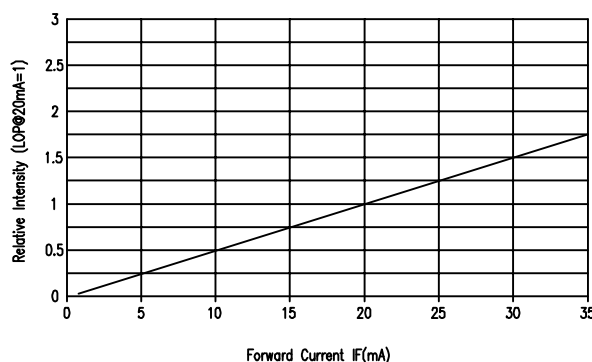
Forward Current Derating Curve



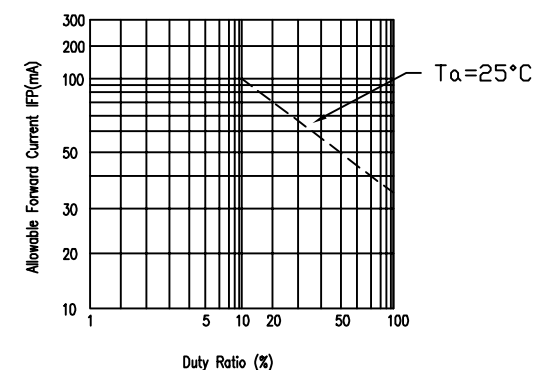
Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current



Duty Ratio vs. Allowable Forward Current



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REV.

A

PART NUMBER

SML-H150E5SID/1

5X4mm ELLIPTICAL SURFACE MOUNTED DOME LED,
635nm RED LED, RED DIFFUSED.

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