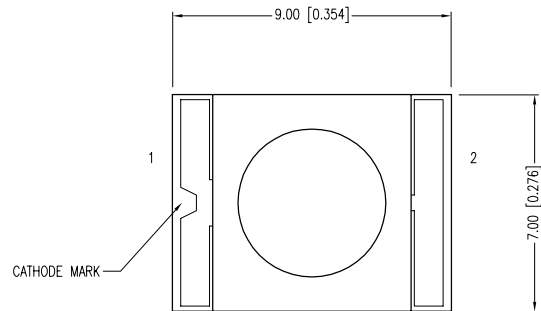
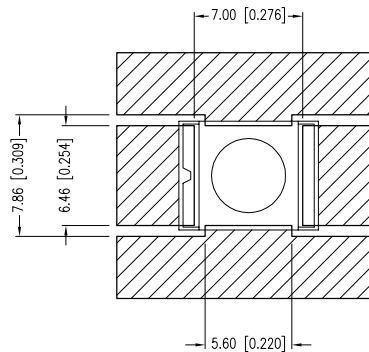


RECOMMENDED SOLDER PAD LAYOUT

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

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST COND
FORWARD VOLTAGE	V_f		3.2	3.6	V	$I_f=350\text{mA}$
	V_f		3.4	3.6	V	$I_f=500\text{mA}$
REVERSE VOLTAGE	V_r	5.0			V	$I_r=10\mu\text{A}$
LUMINOUS FLUX	I_v	60		90	lm	$I_f=350\text{mA}$
	I_v		95		lm	$I_f=500\text{mA}$
COLOR TEMPERATURE		2870	3000	3220	$^\circ\text{K}$	
VIEWING ANGLE			90		$2\times$ theta	
EMITTED COLOR:	WARM WHITE					
EPOXY LENS FINISH:	WATER CLEAR LENS					

LIMITS OF SAFE OPERATION AT 25°C

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT	500	mA
STEADY CURRENT	350	mA
POWER DISSIPATION	1800	mW
OPERATING TEMP.	-40 TO $+90$	$^\circ\text{C}$
STORAGE TEMP.	-40 TO $+100$	$^\circ\text{C}$

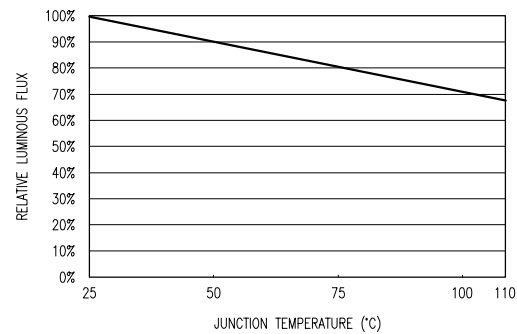
THERMAL PARAMETERS

PARAMETER	MAX	UNITS
JUNCTION TEMPERATURE	110	$^\circ\text{C}$
THERMAL RESISTANCE (JUNCTION/SOLDER)	11	$^\circ\text{C}/\text{W}$
TEMPERATURE COEFFICIENT OF V_f	-3.2	mV/ $^\circ\text{C}$

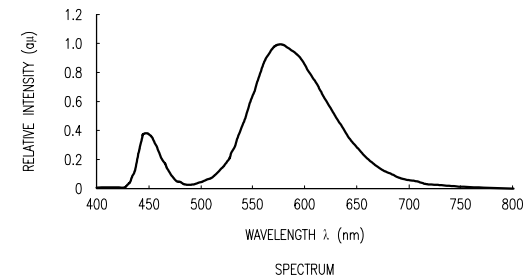
CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.

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

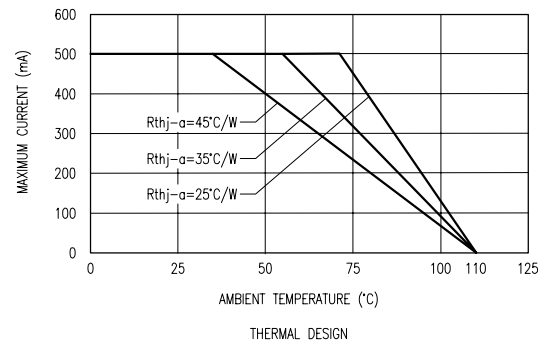
UNCONTROLLED DOCUMENT



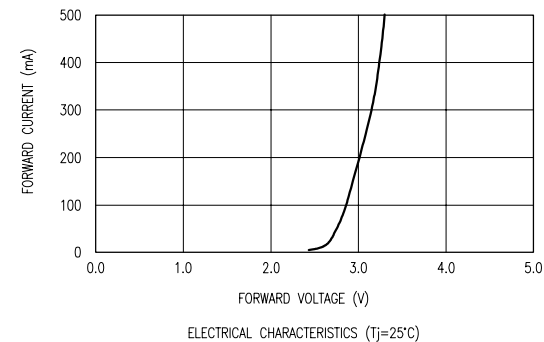
RELATIVE LUMINOUS FLUX vs. JUNCTION TEMPERATURE (IF=350mA)



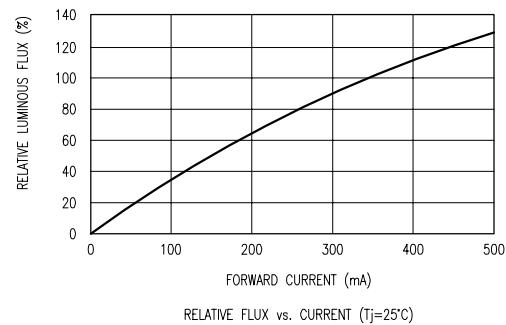
SPECTRUM



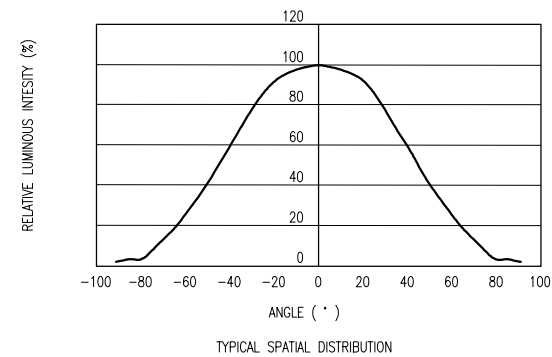
THERMAL DESIGN



ELECTRICAL CHARACTERISTICS (Tj=25°C)



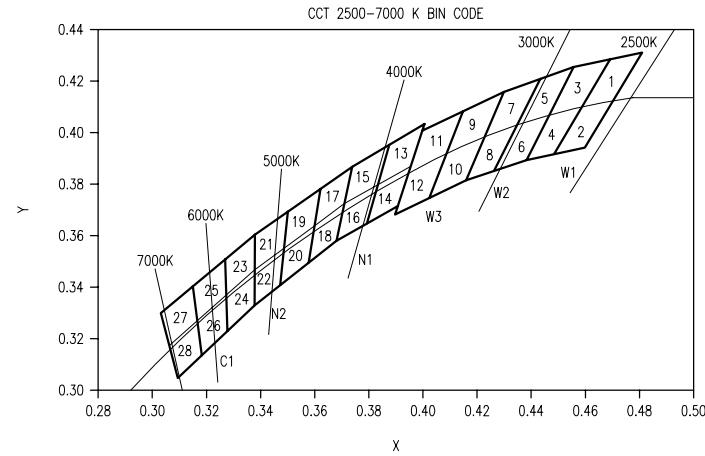
RELATIVE FLUX vs. CURRENT (Tj=25°C)



TYPICAL SPATIAL DISTRIBUTION

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

UNCONTROLLED DOCUMENT



COLOR	GROUP	CHROMATICITY REGIONS	MIN.	TYP.	MAX.
WARM WHITE	W1	1,2,3,4	2580	2700	2870
	W2	5,6,7,8	2870	3000	3220
	W3	9,10,11,12	3220	3500	3710
WARM WHITE	N1	13,14,15,16	3710	4000	4260
	N2	17,18,19,20,21,22	4260	4700	5310
COOL WHITE	C1	23,24,25,26,27,28	5310	6000	7040

	X	Y		X	Y		X	Y		X	Y		X	Y		X	Y
1	0.4582	0.4099	6	0.4259	0.3853	11	0.3941	0.3848	16	0.3670	0.3578	21	0.3496	0.3702	26	0.3265	0.3371
	0.4687	0.4289		0.4342	0.4028		0.3996	0.4015		0.3702	0.3722		0.3376	0.3616		0.3160	0.3274
	0.4813	0.4319		0.4465	0.4071		0.4146	0.4089		0.3825	0.3798		0.3370	0.3472		0.3175	0.3139
	0.4700	0.4126		0.4373	0.3893		0.4080	0.3916		0.3783	0.3646		0.3481	0.3557		0.3270	0.3230
2	0.4483	0.3919	7	0.4221	0.3984	12	0.3889	0.3690	17	0.3736	0.3874	22	0.3481	0.3557	27	0.3144	0.3408
	0.4582	0.4099		0.4299	0.4165		0.3941	0.3848		0.3616	0.3788		0.3370	0.3472		0.3028	0.3304
	0.4700	0.4126		0.4430	0.4212		0.4080	0.3916		0.3592	0.3641		0.3364	0.3328		0.3055	0.3177
	0.4593	0.3944		0.4342	0.4028		0.4017	0.3751		0.3703	0.3726		0.3466	0.3411		0.3160	0.3274
3	0.4465	0.4071	8	0.4147	0.3814	13	0.3825	0.3798	18	0.3703	0.3726	23	0.3376	0.3616	28	0.3160	0.3274
	0.4562	0.4260		0.4221	0.3984		0.3869	0.3959		0.3592	0.3641		0.3260	0.3512		0.3055	0.3177
	0.4687	0.4289		0.4342	0.4028		0.4006	0.4044		0.3568	0.3495		0.3265	0.3371		0.3081	0.3049
	0.4582	0.4099		0.4259	0.3853		0.3950	0.3875		0.3670	0.3578		0.3370	0.3472		0.3175	0.3139
4	0.4373	0.3893	9	0.4080	0.3916	14	0.3783	0.3646	19	0.3616	0.3788	24	0.3370	0.3472			
	0.4465	0.4071		0.4146	0.4089		0.3825	0.3798		0.3496	0.3702		0.3265	0.3371			
	0.4582	0.4099		0.4299	0.4165		0.3950	0.3875		0.3481	0.3557		0.3270	0.3230			
	0.4483	0.3919		0.4221	0.3984		0.3898	0.3716		0.3592	0.3641		0.3364	0.3328			
5	0.4342	0.4028	10	0.4017	0.3751	15	0.3702	0.3722	20	0.3592	0.3641	25	0.3260	0.3512			
	0.4430	0.4212		0.4080	0.3916		0.3736	0.3874		0.3481	0.3557		0.3144	0.3408			
	0.4562	0.4260		0.4221	0.3984		0.3869	0.3958		0.3466	0.3411		0.3160	0.3274			
	0.4465	0.4071		0.4147	0.3814		0.3825	0.3798		0.3568	0.3495		0.3265	0.3371			

*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.= $\begin{matrix} +\text{DECIMAL PRECISION} \\ -0.00 \end{matrix}$ MAX.= $\begin{matrix} +0.00 \\ -\text{DECIMAL PRECISION} \end{matrix}$

UNCONTROLLED DOCUMENT



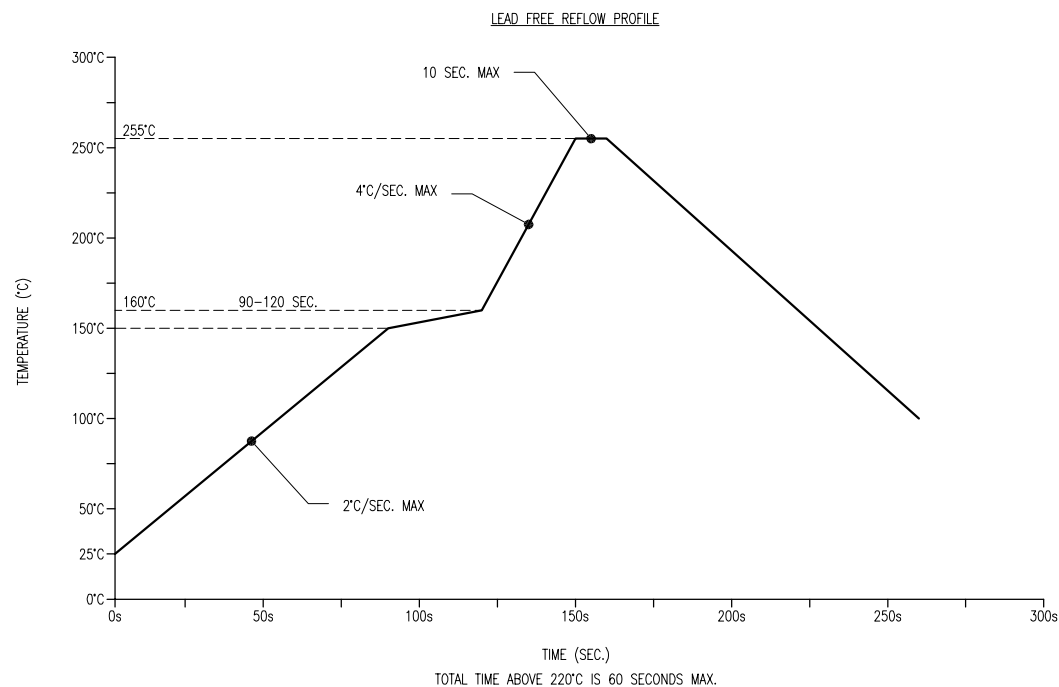
290 E. HELEN ROAD
PALATINE, IL 60067-6976
PHONE: +1.847.359.2790
FAX: +1.847.359.6538
WEB: WWW.LUMEX.COM

9.0 x 7.0mm, WARM WHITE LED, WATER CLEAR LENS

THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.

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.

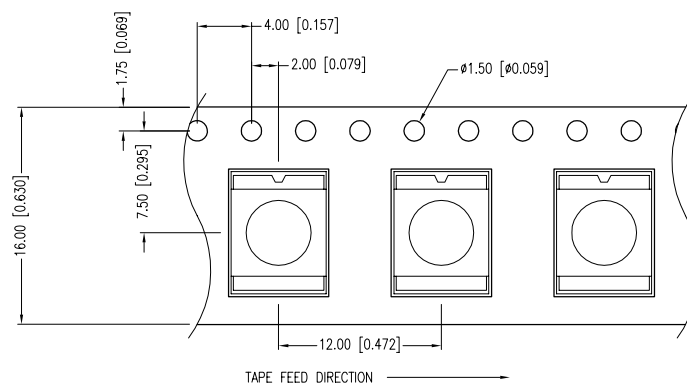
DATE:	03.16.11	DRAWN BY:	AB
PAGE:	3 OF 4	CHKD BY:	BC
SCALE:	NTS	APRVD BY:	KF
UNIT:	mm [INCH]		Ⓟ



TEMPERATURE	MAXIMUM PERCENT RELATIVE HUMIDITY						
	30%	40%	50%	60%	70%	80%	90%
30°C	9	5	4	3	1	1	1
25°C	12	7	5	4	2	1	1
20°C	17	9	7	6	2	2	1

NOTES:

1. WE RECOMMEND THAT THE DEVICES MUST BE BAKED BEFORE SOLDERING IF THEY ARE REMOVED FROM THE ORIGINAL PACKAGE, AND ARE EXPOSED TO ENVIRONMENTAL CONDITIONS FOR LONGER THAN THE DURATIONS; (UNIT: DAYS) DEFINED IN THE TABLE BELOW.
2. RECOMMENDED BAKING CONDITIONS ARE 24 HOURS AT 80°C
3. CATHODE ORIENTED TOWARDS TAPE SPROCKET HOLE.



*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.= $\begin{matrix} +0.00 \\ -0.00 \end{matrix}$ DECIMAL PRECISION MAX.= $\begin{matrix} +0.00 \\ -0.00 \end{matrix}$ DECIMAL PRECISION

UNCONTROLLED DOCUMENT



290 E. HELEN ROAD
PALATINE, IL 60067-6976
PHONE: +1.847.359.2790
FAX: +1.847.359.6538
WEB: WWW.LUMEX.COM

9.0 x 7.0mm, WARM WHITE LED, WATER CLEAR LENS

THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.

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.

DATE:	03.16.11	DRAWN BY:	AB
PAGE:	4 OF 4	CHKD BY:	BC
SCALE:	NTS	APRVD BY:	KF
UNIT:	mm [INCH]		(Pb)