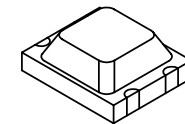
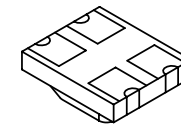


REV	ECR NO.	DATE
A	10950 NEW RELEASE	11/23/94
B	14472 ADD. POLARITY TO BI-COLOR LED	4/8/97
C	15244 KB CHG'D CATHODE POS. AND ADDED SHT. 2	10/23/97
D	20407 RHW REMOVED PART NUMBER CMO11304UR.	05/04/01

SPECIFICATIONS		CMO11304MR	CMO11304Y	CMO11304A	CMO11304G	CMO11354MRG	CMO11354AG	CMO11354URG
EMITTED COLOR	CHIP #1	H.E.R	Y	A	H.E.G	H.E.R	A	UR
	CHIP #2					H.E.G	H.E.G	H.E.G
LENS COLOR		C						
DIFFUSED-NONDIFFUSED		NON-DIFFUSED						

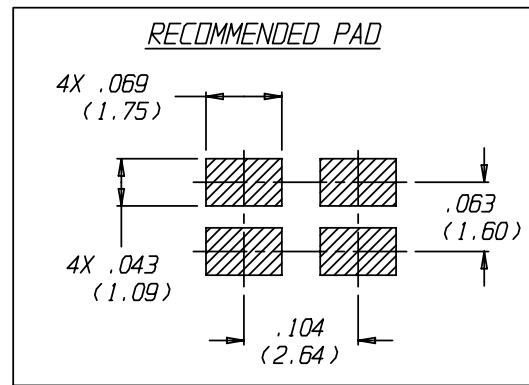
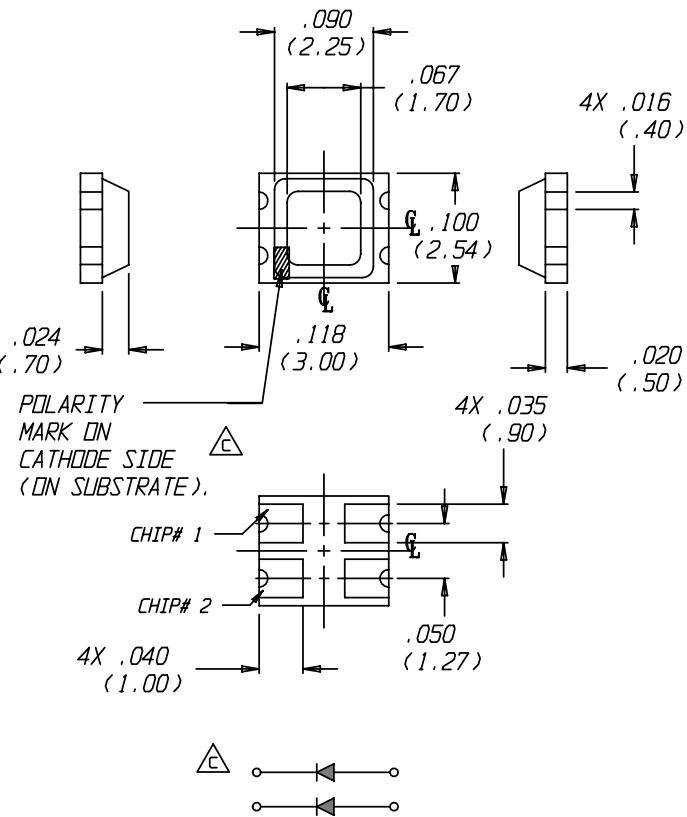
ABSOLUTE MAXIMUM RATINGS										SYMBOLS	UNITS
POWER DISSIPATION	65	70	80	65	65	80	45			P_d	mW
FORWARD CURRENT (AVERAGE)	25	25	25	25	25	25	15			I_F	mA
PEAK FORWARD CURRENT (1 ns @ 10% DUTY CYCLE)	100	100	100	100	100	100	60			I_{FM}	mA
REVERSE VOLTAGE $I_R=100 \mu A$	4.0	4.0	4.0	4.0	4.0	4.0	3.0			V_R	V
STORAGE/OPERATING TEMP.	-25 TO +75									T_{opr}	°C
LEAD SOLDER TIME AT 260°C	10										SECONDS

ELECTRO-OPTICAL CHARACTERISTICS											SYMBOLS	UNITS
FORWARD VOLTAGE	(IF=20 mA)	TYP	2.0	2.1	2.1	2.0	2.0	2.1	1.7		V_F	V
		MAX	2.6	2.8	2.8	2.6	2.6	2.8	2.6			
	(IF=10 mA)	TYP										
		MAX										
LUMINOUS INTENSITY	(IF=20 mA)	MIN	2.6	5.0	5.0	11.0	1.6	3.0	4.0		I_v	ncd
		TYP	7.0	14.0	14.0	22.0	4.0	8.0	8.0			
	(IF=10 mA)	MIN										
		TYP										
PEAK WAVELENGTH (IF=20 mA)		630	585	610	565	630	610	660		λ_p	nm	
VIEW ANGLE		100										deg



FOR REF. ONLY

DIST.
V



IDI COLOR CODE	
D	DIFFUSED
N	NON-DIFFUSED
U	ULTRA
C	CLEAR
R	RED
A	AMBER
G	GREEN
Y	YELLOW
H.E.	HIGH EFFICIENCY

THIS DWG IS THE PROPERTY OF CHICAGO MINIATURE LAMP INC. AND IS PROPRIETARY IN GENERAL AND IN DETAIL. IT SHALL NOT BE COPIED OR ITS CONTENTS REVEALED TO OUTSIDE PARTIES WITHOUT THE WRITTEN CONSENT OF CHICAGO MINIATURE LAMP INC.

DO NOT SCALE

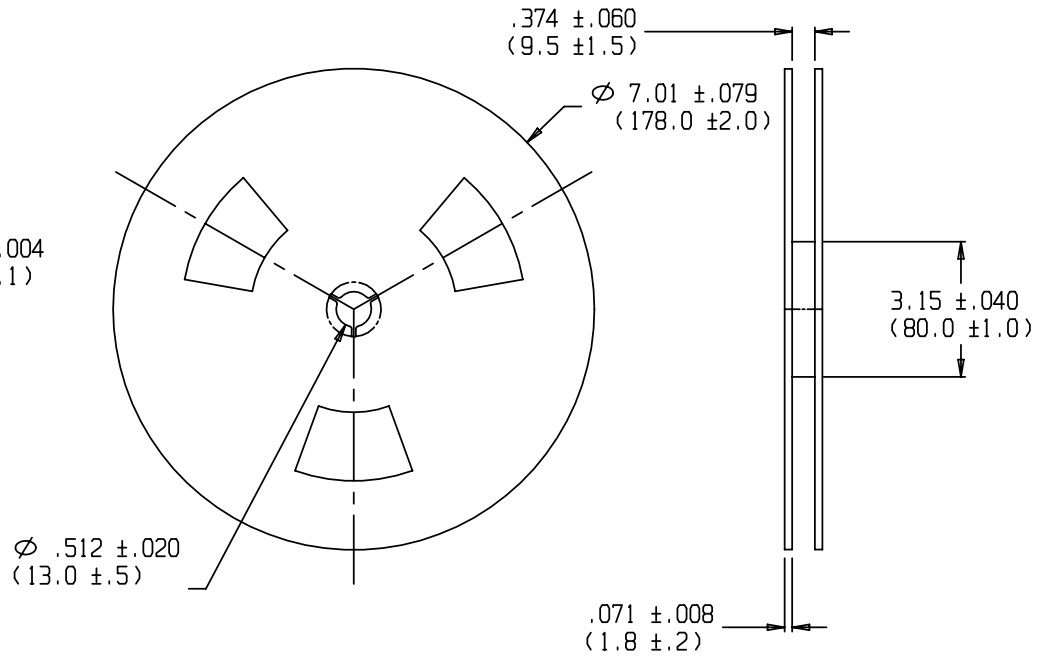
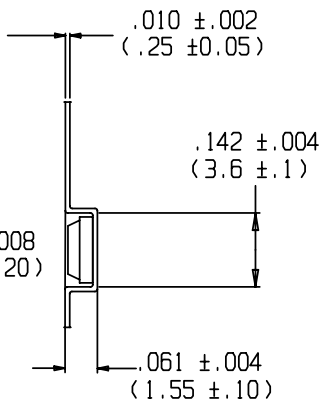
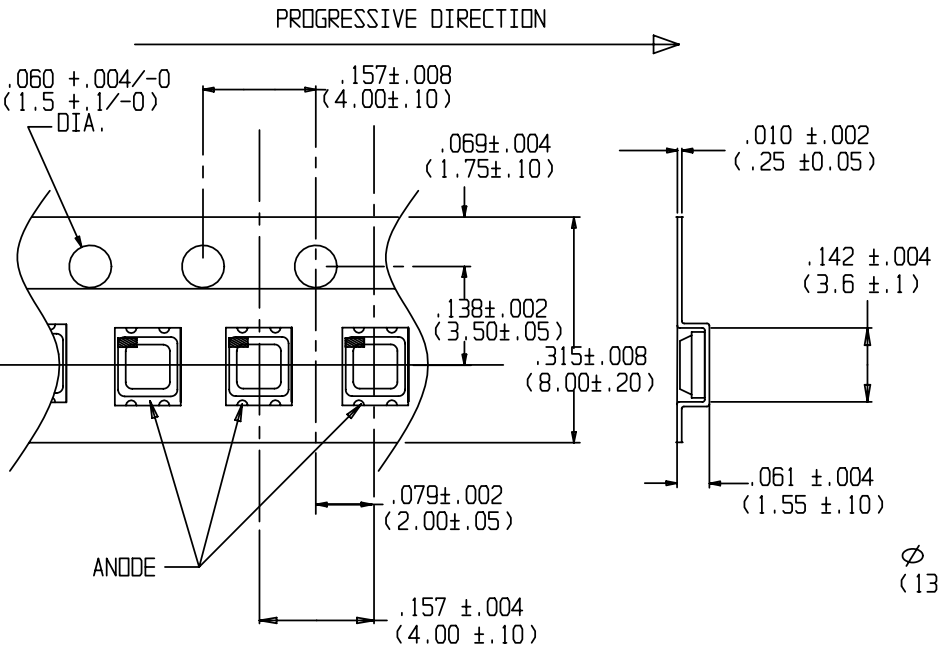
ALL DIM'S. ARE IN INCHES (mm).

SHEET 1 OF 2

PART NO. SEE TABLE	TITLE SURFACE MOUNT LED (DUAL CHIP)
MODEL NO.	
MOLD NO.	
MATERIAL:	CHICAGO MINIATURE LAMP INC. 147 CENTRAL AVE. HACKENSACK, NJ 07601
FINISH:	
TOLERANCE UNLESS OTHERWISE SPECIFIED:	DRAWN JEANNETTE R.
FRACTION 1/64	CHECKED
DECIMAL .xx +/- .010 .xxx +/- .005	ENG. APPRV
MILLIMETER .x .3mm .xx .13mm	
ANGLE 1 deg.	SCALE: 8:1
	B12512
	REV D

SHEET 1 OF 2

REV	ECR NO./DESCRIPTION	DATE
	SEE SHEET ONE	




QUANTITY 3000 PIECES PER REEL

DIST.
V/S

- NOTES:
1. ALL DIMENSIONS ARE IN INCHES (mm).
 2. TAPE AND REEL DIMS PER EIA 481-1 (8 + 12mm).

DO NOT SCALE

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PART NO. SEE TABLE	TITLE SURFACE MOUNT LED	
MODEL NO.	 CHICAGO MINIATURE LAMP INC. 147 CENTRAL AVE. HACKENSACK, NJ 07601	
MOLD NO.		
MATERIAL:	DRAWN K. BARRETT	SCALE: NTS
FINISH:	CHECKED	B12512 REV D
TOLERANCE UNLESS OTHERWISE SPECIFIED:	ENG. APPRV	
FRACTION INCHES ANGLE	$\pm 1/64$ $.xx \pm .010 (0.25)$ $.xxx \pm .010 (0.25)$ $\pm 1 \text{ deg.}$	

ON 5MO

SHEET 2 OF 2