



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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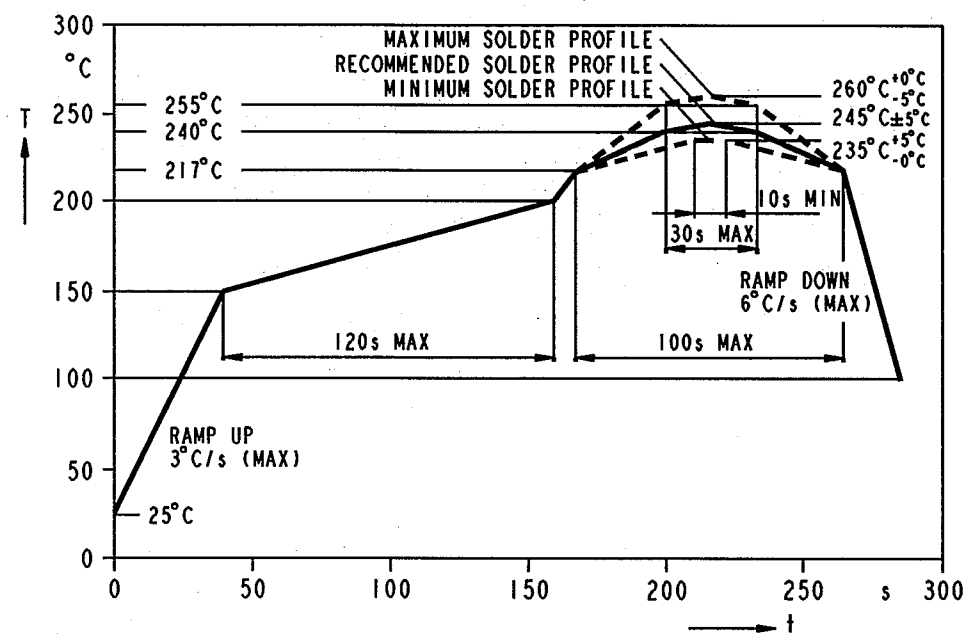


PART NUMBER	LED COLOR
591-2001-102F	
591-2001-107F	HI. EFF. RED
591-2001-113F	
591-2101-102F	AlGaAs RED
591-2101-107F	
591-2101-113F	
591-2201-102F	HI. INTENSITY GREEN
591-2201-107F	
591-2201-113F	
591-2301-102F	GREEN
591-2301-107F	
591-2301-113F	
591-2401-102F	YELLOW
591-2401-107F	
591-2401-113F	
591-2501-102F	ORANGE
591-2501-113F	
591-2601-102F	BLUE
591-2601-107F	
591-2601-113F	
591-2701-102F	AlInGaP YELLOW
591-2701-107F	
591-2701-113F	
591-2801-102F	WHITE
591-2801-107F	
591-2801-113F	
591-2901-102F	InGaN GREEN
591-2901-107F	
591-2901-113F	

OPERATING CHARACTERISTICS AT 25°C AMBIENT											
COLOR	LUMINOUS INTENSITY @ I <sub>f</sub> = 10 mA (mcd)			FORWARD VOLTAGE TEST CONDITION	FORWARD VOLTAGE (V)		REVERSE VOLTAGE (I <sub>r</sub> =10μA)	DOMINANT WAVELENGTH (nm)			PEAK WAVELENGTH (nm)
	MIN	TYP	MAX		TYP	MAX		MIN	TYP	MAX	
HI. EFF. RED	5.6	9.8	14.0	I <sub>f</sub> = 10 mA	2.0	2.5	12 V	622	628	634	635
AlGaAs RED	21.6	38.0	56.0	I <sub>f</sub> = 10 mA	1.8	2.5	12 V	—	645	—	660
HI. INT. GREEN	13.8	24.0	35.8	I <sub>f</sub> = 10 mA	2.0	2.5	12 V	564	570	576	572
GREEN	7.1	10.6	14.0	I <sub>f</sub> = 10 mA	2.0	2.5	12 V	564	570	576	572
YELLOW	7.1	12.6	18.0	I <sub>f</sub> = 10 mA	2.0	2.5	12 V	580	587	595	586
ORANGE	4.5	8.0	11.6	I <sub>f</sub> = 10 mA	2.0	2.5	12 V	600	606	609	610
BLUE	7.6	12.0	20.0	I <sub>f</sub> = 10 mA	3.5	4.2	5 V	462	465	468	428
AlInGaP YELLOW	40.0	62.0	—	I <sub>f</sub> = 20 mA	2.0	2.4	12 V	580	587	595	591
WHITE	80	130	210	I <sub>f</sub> = 10 mA	3.1	3.7	5 V	X .33	—	—	—
InGaN GREEN	85	160	—	I <sub>f</sub> = 20 mA	3.4	4.05	5 V	Y .33	—	—	—

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT						
COLOR	POWER DISSIPATION (mW)	CONTINUOUS FORWARD CURRENT (mA)	PEAK FORWARD CURRENT (I <sub>p</sub> ≤ 10μs, D = .005) (mA)	DERATE LINEARLY (mA/°C)	OPERATING TEMPERATURE (°C)	STORAGE TEMPERATURE (°C)
HI. EFF. RED	95	30	500	0.75 FROM 60°C	-40 TO +100	-40 TO +100
AlGaAs RED	90	30	500	0.75 FROM 60°C		
HI. INT. GREEN	95	30	500	0.75 FROM 60°C		
GREEN	95	30	500	0.75 FROM 60°C		
YELLOW	95	30	500	0.75 FROM 60°C		
ORANGE	95	30	500	0.75 FROM 60°C		
BLUE	90	20	200	0.44 FROM 55°C		
AlInGaP YELLOW	80	30	200	1.0 FROM 85°C		
WHITE	80	20	200	0.75 FROM 60°C		
InGaN GREEN	115	30	100 (I <sub>p</sub> ≤ 1.0ms, D = 0.1)	0.42 FROM 40°C		

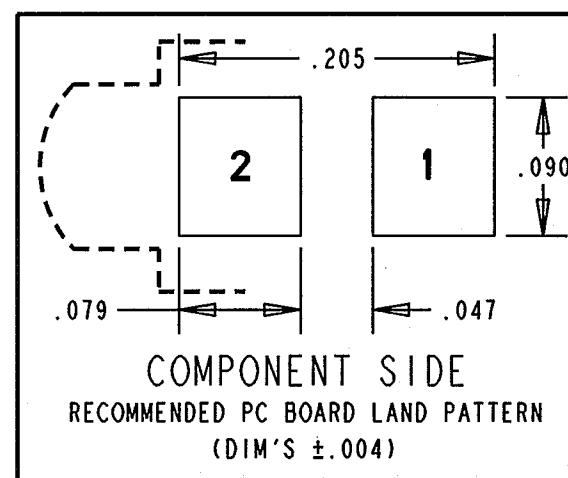
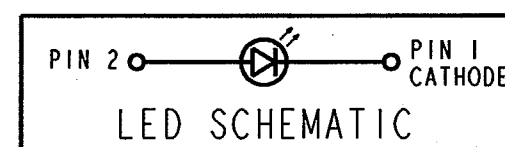
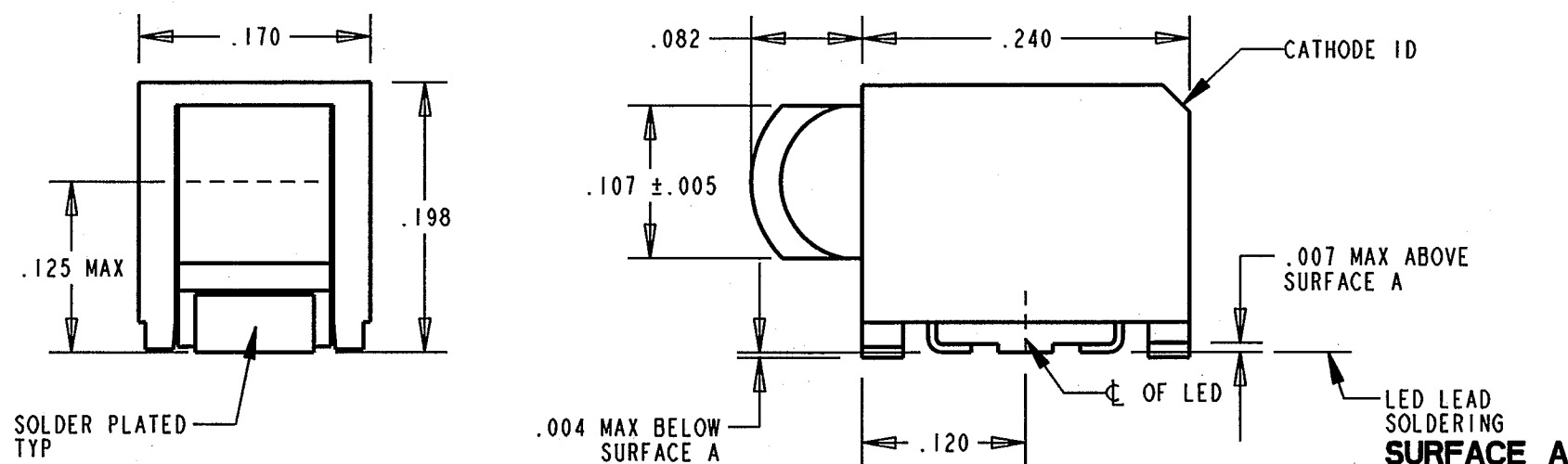
REV	ECN NO	REVISIONS	DRN	CKD	APP	DATE
A	—	NEW RELEASE	ALV	N.O.	MES	10-6-05
B	—	ADDED P/N'S 591-2901-102F, -107F, -113F AND 591-2501-102F, -013F; ADDED InGaN GRN AND ORANGE SPECS; UPDATED SPECS.	KLJ	he	1/8/2009	



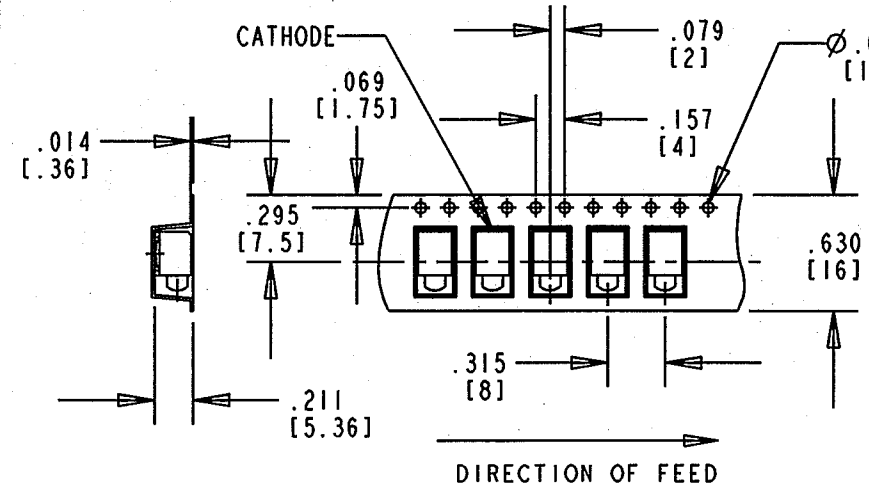
RECOMMENDED RoHS COMPLIANT REFLOW PROFILE

NOTES :

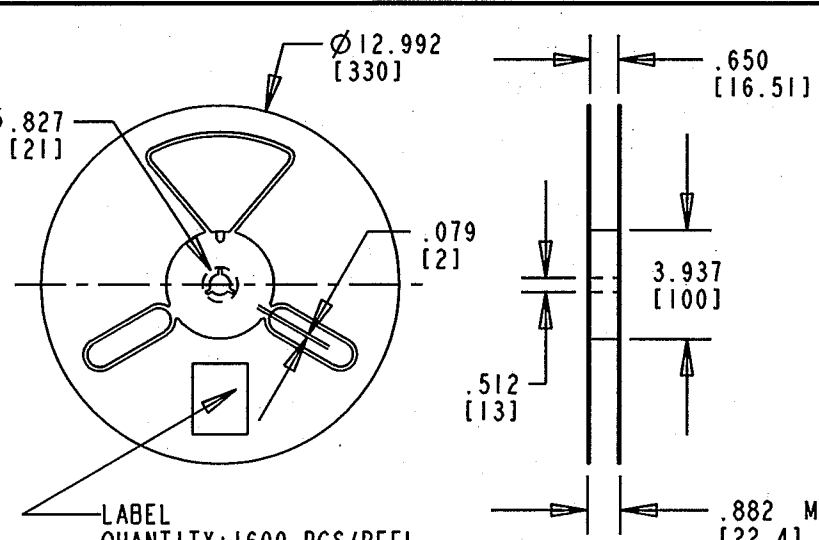
- MILLIMETER DIMENSIONS SHOWN FOR REFERENCE ONLY.
- PAD NUMBERS ARE FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PART.
- STORAGE CONDITIONS FOR TAPED PRODUCT: RE-TAPING MAY BE NECESSARY FOR PRODUCTS STORED MORE THAN TWELVE MONTHS.
- ORDER QUANTITY IS LED ASSEMBLIES, NOT REELS.
- ...-102F SUFFIX MEANS PARTS ARE PACKED ON A 20 pc SAMPLE STRIP  
...-107F SUFFIX MEANS PARTS ARE PACKED ON A 7 INCH REEL, 400 pcs/REEL  
...-113F SUFFIX MEANS PARTS ARE PACKED ON A 13 INCH REEL, 1600 pcs/REEL
- LENS MOVEMENT IN RELATIONSHIP TO THE HOUSING IS:  
.009" T.I.R. VERTICALLY  
.007" T.I.R. HORIZONTALLY
- FRONT AND REAR TERMINALS OF THE ASSEMBLY TO BE WITHIN .005 COPLANARITY.
- DIALIGHT PART NUMBERS = 591-2x01-102F 591-2x01-107F 591-2x01-113F
- DRY PACK PACKAGING CONSIST OF A DESICCANT AND HUMIDITY INDICATOR CARD IN A VACUUM SEALED MOISTURE BARRIER BAG, MOISTURE SENSITIVITY LABEL LEVEL 2 (2a for 591-2901-1XXF) ON OUTSIDE OF BAG, AS PER JEDEC STD. 033.
- THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING, AND STORAGE IN ACCORDANCE WITH IPC-A-610.



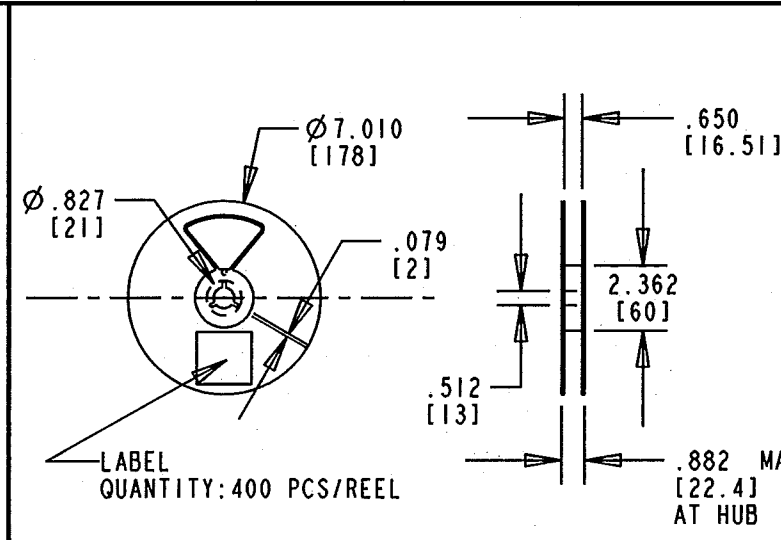
TAPING SPECIFICATION



TOLERANCE: .004 UNLESS OTHERWISE SPECIFIED  
MILLIMETER DIMENSIONS SHOWN FOR REFERENCE ONLY



13 INCH DIA. REEL SPECIFICATIONS



7 INCH DIA. REEL SPECIFICATIONS



ATTENTION:  
OBSERVE PRECAUTIONS FOR  
HANDLING ELECTROSTATIC  
SENSITIVE DEVICES

RoHS Compliant 591-2X01-1XXF

Part Numbers with the "F" suffix ending are RoHS Compliant.  
Example: 591-2001-102F  
Packaging is marked with "RoHS Compliant" label or equivalent markings.  
Parts can be reflow soldered per RoHS reflow profile, wave soldered, dip soldered or hand soldered using typical lead-free soldering process with max 260°C temp. for 5 sec.

THIS DRAWING AND THE CONTENTS HEREIN ARE CONFIDENTIAL AND THE SOLE PROPERTY OF DIALIGHT. REPRODUCTION OF THIS DRAWING OR CONSTRUCTION OF ANY PARTS WITHIN THIS DRAWING ARE FORBIDDEN WITHOUT THE WRITTEN CONSENT OF DIALIGHT.		
SCALE: DRAWING SCALE ALL DIM'S IN: INCHES (MM)	DRAWING NUMBER C-17429	REV B
TOLERANCES: UNLESS OTHERWISE SPECIFIED FRACTIONS: ±1/64 DECIMALS (.XX): ±.02 DECIMALS (.XXX): ±.010	TITLE SURFACE MOUNT CBI - SQUARE LENS RoHS COMPLIANT	MATERIAL
ANGLES: ±3° FINISH:	Dialight 1501 ROUTE 34 SOUTH FARMINGDALE, NJ 07727	
FSCM 83330	SHEET 1 OF 1 FAMILY TABLES:	