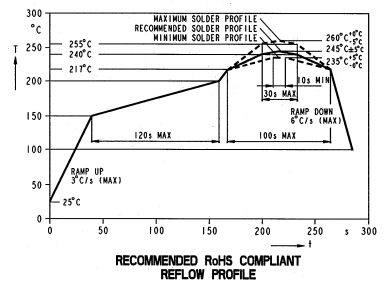


PART NUMBER	LED COLOR
591-2001-102F	
591-2001-107F	HI. EFF. RED
591-2001-113F	
591-2101-102F	AlGaAs RED
591-2101-107F	
591-2101-113F	
591-2201-102F	HI. INTENSITY GREEN
591-2201-107F	
591-2201-113F	
591-2301-102F	GREEN
591-2301-107F	
591-2301-113F	
591-2401-102F	YELLOW
591-2401-107F	
591-2401-113F	
591-2501-102F	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 @ If = 10 mA (mcd)			FORWARD VOLTAGE TEST CONDITION		FORWARD VOLTAGE (V)		REVERSE VOLTAGE (100µA)		DOMINANT WAVELENGTH (nm)		PEAK WAVELENGTH (nm)
	MIN	TYP	MAX	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	TYP
HI. EFF. RED	5.5	9.8	14.0	If = 10 mA	2.0	2.5	12 V	622	628	634	635	
AlGaAs RED	21.6	38.0	55.0	If = 10 mA	1.8	2.5	12 V	—	645	—	660	
HI. INT. GREEN	13.8	24.0	35.8	If = 10 mA	2.0	2.5	12 V	564	570	576	572	
GREEN	7.1	10.6	14.0	If = 10 mA	2.0	2.5	12 V	564	570	576	572	
YELLOW	7.1	12.6	18.0	If = 10 mA	2.0	2.5	12 V	580	587	595	586	
ORANGE	4.5	8.0	11.6	If = 10 mA	2.0	2.5	12 V	600	606	609	610	
BLUE	7.6	12.0	20.0	If = 10 mA	3.5	4.2	5 V	462	465	468	428	
AlInGaP YELLOW	40.0	62.0	—	If = 20 mA	2.0	2.4	12 V	580	587	595	591	
WHITE	80	130	210	If = 10 mA	3.1	3.7	5 V	X .33 Y .33	—	—	—	
InGaN GREEN	85	160	—	If = 20 mA	3.4	4.05	5 V	515	525	535	523	

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT						
COLOR	POWER DISSIPATION (mW)	CONTINUOUS FORWARD CURRENT (mA)	PEAK FORWARD CURRENT (1/2 Duty, 20-9999) (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	-40 TO +100	-40 TO +100
HI. INT. GREEN	95	30	500	0.75 FROM 60°C	-40 TO +100	-40 TO +100
GREEN	95	30	500	0.75 FROM 60°C	-40 TO +100	-40 TO +100
YELLOW	95	30	500	0.75 FROM 60°C	-40 TO +100	-40 TO +100
ORANGE	95	30	500	0.75 FROM 60°C	-40 TO +100	-40 TO +100
BLUE	90	20	200	0.44 FROM 55°C	-40 TO +100	-40 TO +100
AlInGaP YELLOW	80	30	200	1.0 FROM 85°C	-40 TO +100	-40 TO +100
WHITE	80	20	200	0.75 FROM 60°C	-40 TO +100	-40 TO +100
InGaN GREEN	115	30	100 (1/2 Duty, 0.1-0.1)	0.42 FROM 40°C	-55 TO +100	-55 TO +100

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, -107F, -113F; ADDED InGaN GRN AND ORANGE SPECS; UPDATED SPECS.	RLJ	—	—	11/24/09

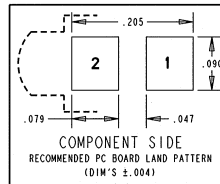
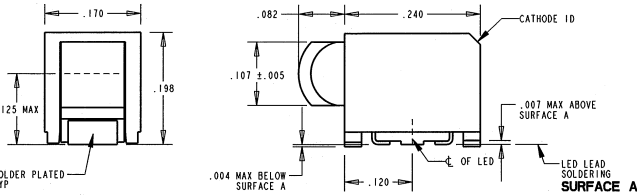


NOTES :

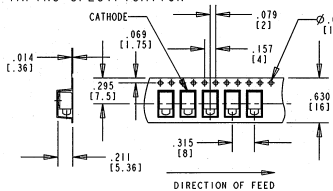
- MILLIMETER DIMENSIONS SHOWN FOR REFERENCE ONLY.
- PAD NUMBERS ARE FOR REFERENCE ONLY. DESIGNATION NON-EXISTENT ON PART.
- STORAGE CONDITIONS FOR TAPED PRODUCT: RE-TAPING MAY BE NECESSARY FOR PRODUCTS STORED MORE THAN TWELVE MONTHS.
- ORDER QUANTITY IS LED ASSEMBLIES, NOT REELS.
- ...-102F SUFFIX MEANS 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 1,600 pcs/REEL
- LENS MOVEMENT IN RELATIONSHIP TO THE HOUSING IS:
...-102F: 0.09" T.I.R. VERTICALLY
...-107F: 0.07" 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.

RoHS Compliant 591-2X01-1XXF

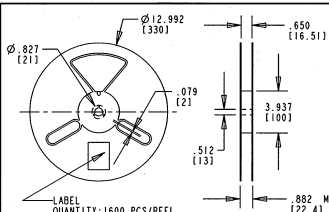
Part Numbers with the "F" suffix ending are RoHS Compliant.
Example: 591-2001-102F
Packaging is marked with "RoHS Compliant" label or equivalent markings.
Parts can be reflow soldered per RoHS reflow profile, wave soldered, dip soldered or hand soldered using typical lead-free soldering process with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



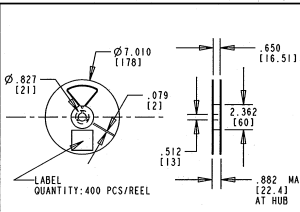
TAPING SPECIFICATION



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

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	DRAWING NUMBER	REV	
ALL DIM'S IN: INCHES (MM)	C-17429	B	
TOLERANCES: UNLESS OTHERWISE SPECIFIED	TITLE SURFACE MOUNT CB1 - SQUARE LENS	RoHS COMPLIANT	
FRACTIONS: 1/16 IN	MATERIAL		
DECIMALS: 1.00; ±.02			
ANGLES: ±1°			
FINISHES: #2			
FSCN 83330	Dialight	1501 ROUTE 34 SOUTH FARMINGDALE, NJ 07727	
	SHEET 1 OF 1	FAMILY TABLES:	