



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

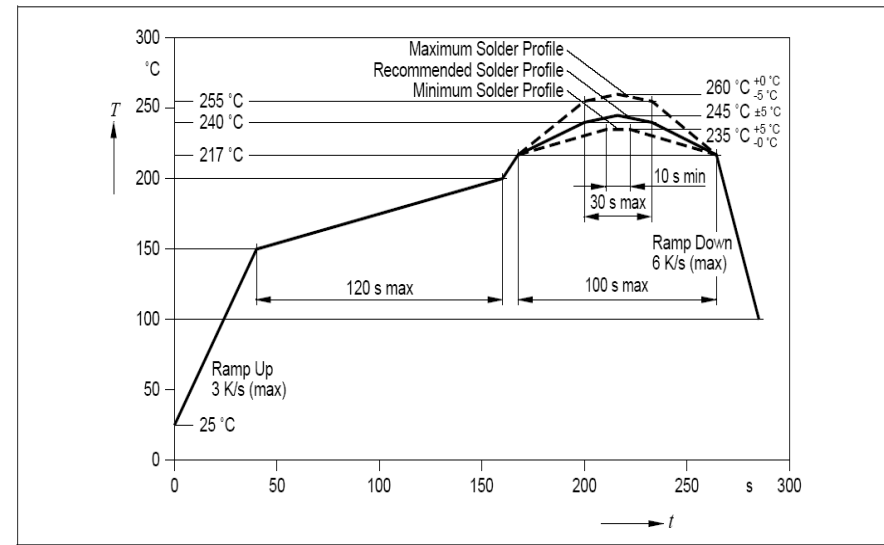
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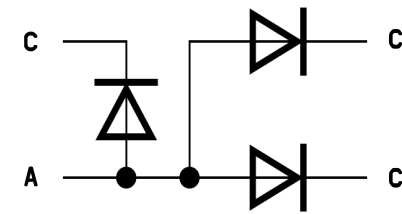
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



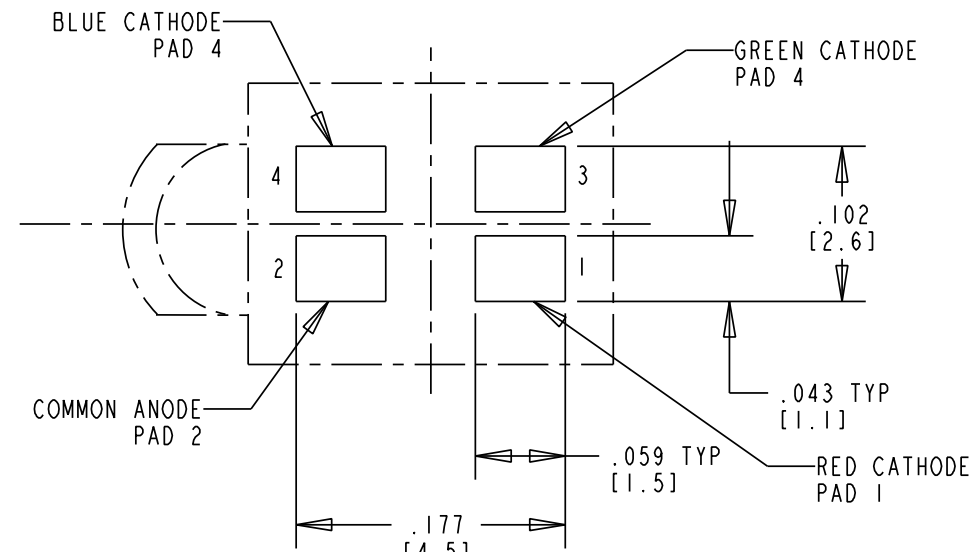
ABSOLUTE MAXIMUM RATINGS AT 25 °C AMBIENT	RED	GREEN	BLUE	UNITS
CONTINUOUS FORWARD CURRENT (ONE CHIPS ON)	30	20	20	V
CONTINUOUS FORWARD CURRENT (ALL CHIPS ON)	30	20	20	V
OPERATING TEMPERATURE	-40 TO +100			°C
STORAGE TEMPERATURE	-40 TO +100			°C
POWER CONSUMPTION	80	85	85	mW



RoHS REFLOW PROFILE



CIRCUIT DIAGRAM

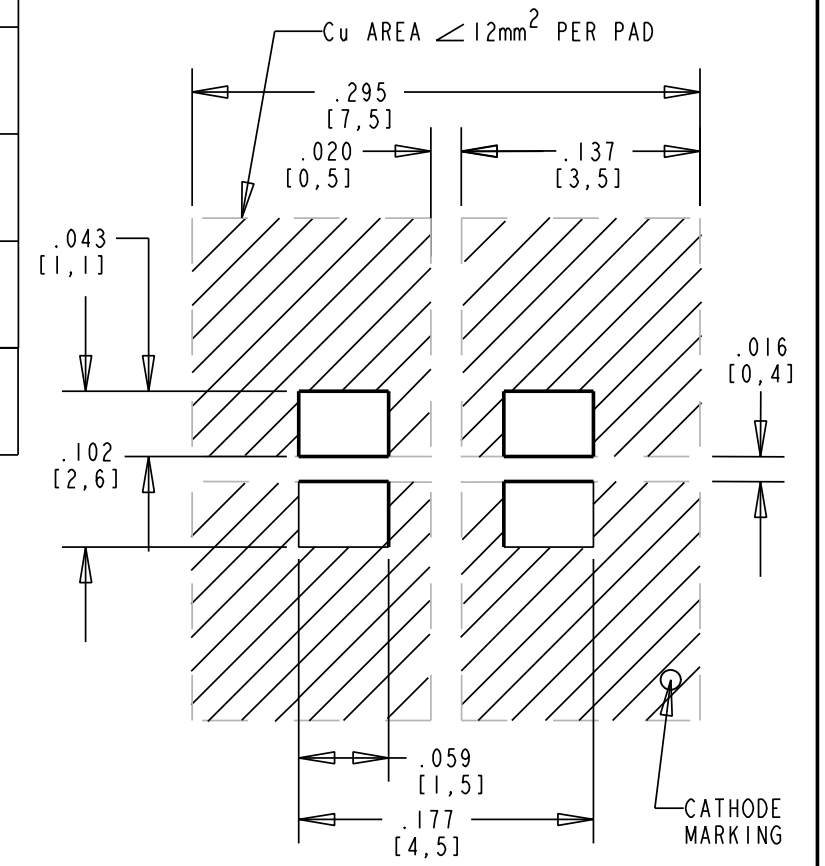


COMPONENT SIDE  
RECOMMENDED PC BOARD LAND PATTERN  
(DIM'S ± .004)  
0.1MM

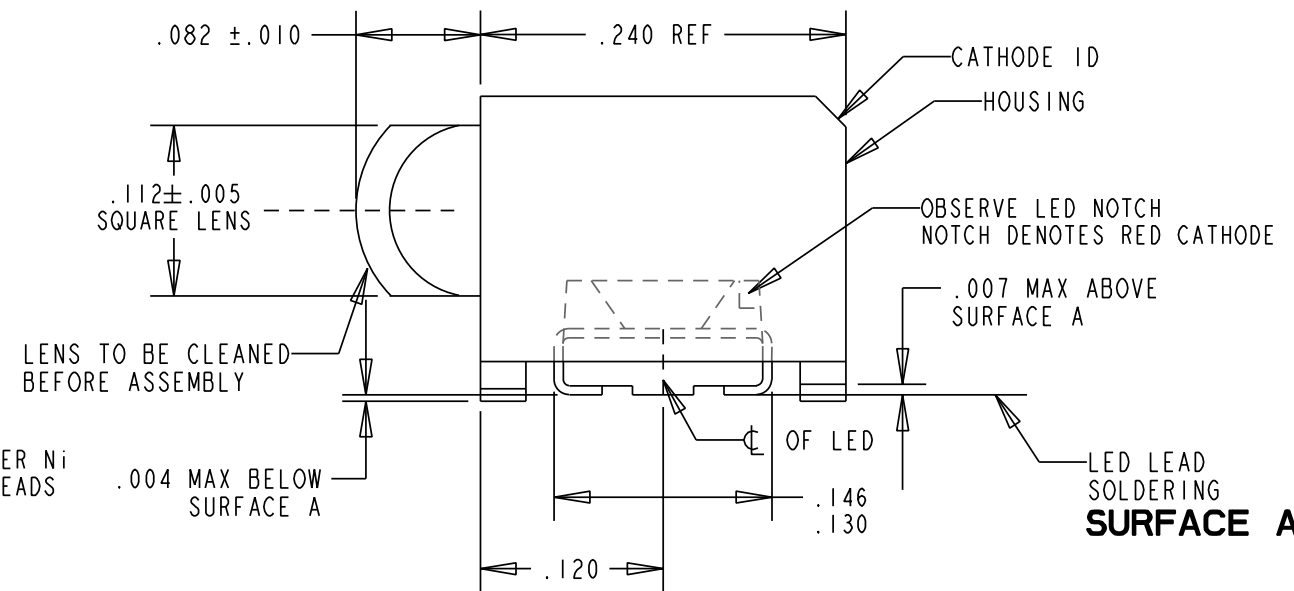
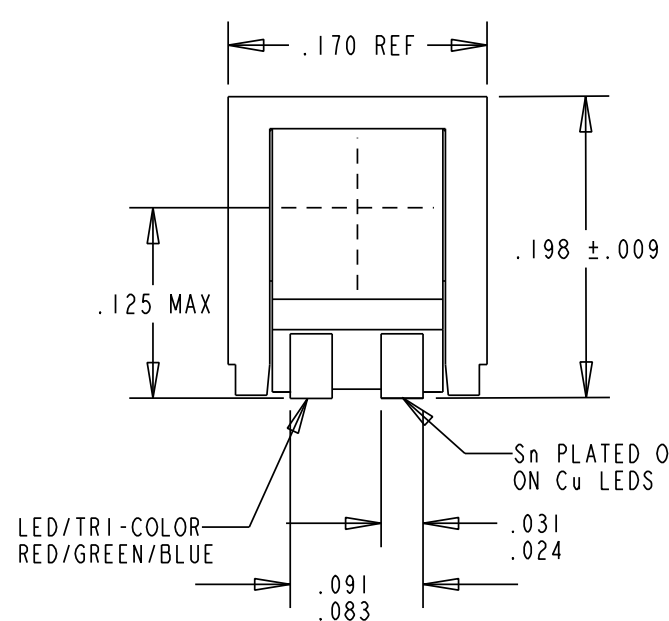
LED CHARACTERISTICS	COLOR	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
FORWARD VOLTAGE	RED	1.83	2.0	2.33	V	I <sub>f</sub> = 20 mA
	GREEN	3.0	3.5	4.1		
	BLUE	3.0	3.6	4.1		
REVERSE CURRENT	RED	0.01		10	mA	V <sub>R</sub> = 12 V (RED) V <sub>R</sub> = 5 V (GREEN/BLUE)
	GREEN	0.01		10		
	BLUE	0.01		10		
PEAK WAVELENGTH	RED		622		nm	I <sub>F</sub> = 20 mA
	GREEN		523			
	BLUE		465			
DOMINANT WAVELENGTH	RED	615	617	625	nm	I <sub>F</sub> = 20 mA
	GREEN	520	528	538		
	BLUE	463	470	475		
VIEWING ANGLE (2 θ 1/2)	RED	40		45	DEG.	I <sub>f</sub> = 20 mA
	GREEN	40		45		
	BLUE	40		45		
LUMINOUS INTENSITY	RED	50	90	140	mcd	I = 20 mA F
	GREEN	270	340	420		
	BLUE	50	80	130		

REV	ECN NO	REVISIONS	DRN	CKD	APP	DATE
A		NEW RELEASE	SM			

TRI-COLOR LEDS  
OPERATING CHARACTERISTICS AT T<sub>A</sub> = 25 °C



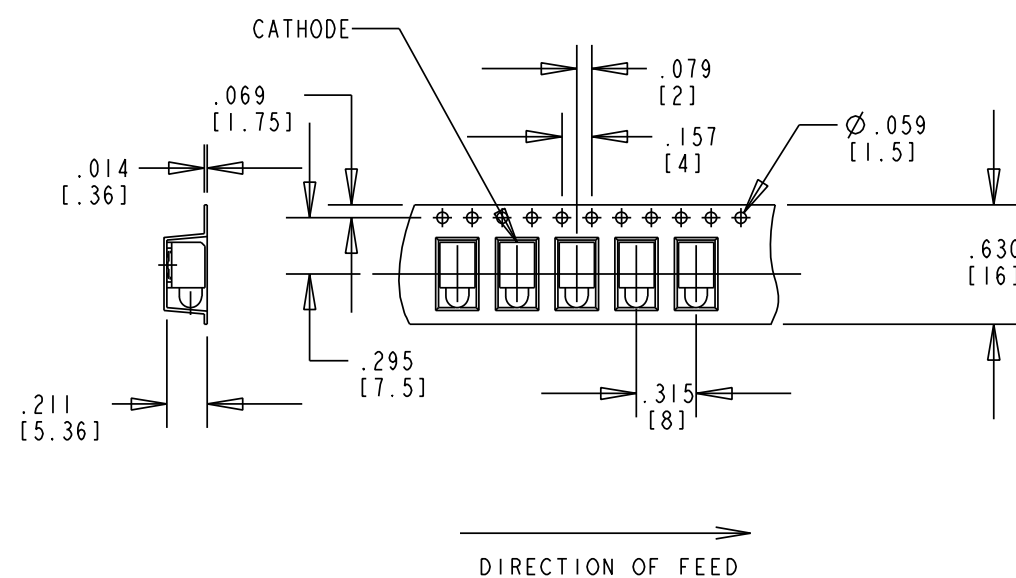
IR REFLOW SOLDERING PAD



NOTES:

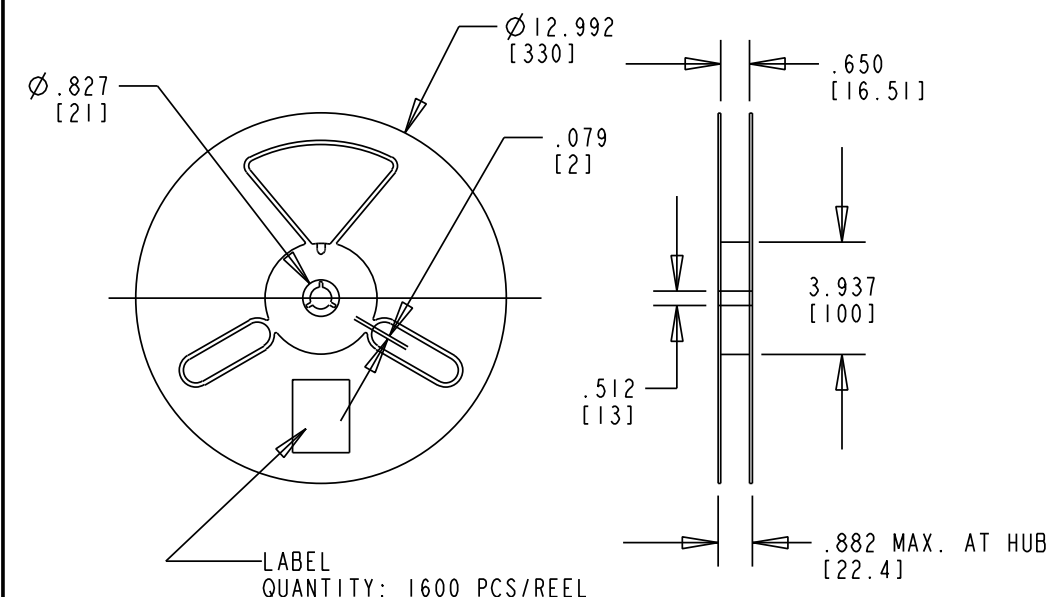
- MILLIMETER DIMENSIONS SHOWN FOR REFERENCE ONLY.
- PAD NUMBERS FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PART.
- STORAGE CONDITIONS FOR TAPED PRODUCT: RE-TAPING MAY BE NECESSARY FOR PRODUCT STORED MORE THAN TWELVE MONTHS.
- ORDER QUANTITY IS LED ASSEMBLIES, NOT REELS.
- 102F SUFFIX MEANS PARTS ARE PACKED ON A 20 PCS 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 ASSEMBLY TO BE WITHIN .005 COPLANARITY.
- DEVICE HAS A MOISTURE SENSITIVITY LEVEL "2" CAUTION LABEL APPLIED AS PER JEDEC STD. 033
- THIS PRODUCT IS Pb FREE. IT IS IN COMPLIANCE WITH THE DIRECTIVE 2002/95/EC (RoHS) AND DOES NOT CONTAIN ANY OF THE BANNED SUBSTANCES Pb, Cd, MERCURY, HEXAVALENT CHROMIUM OR FLAME RETARDANTS (PBB, PBDE)
- REFER TO DIALIGHT P/N 591-3501-102F, 591-3501-107F & 591-3501-113F.
- 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

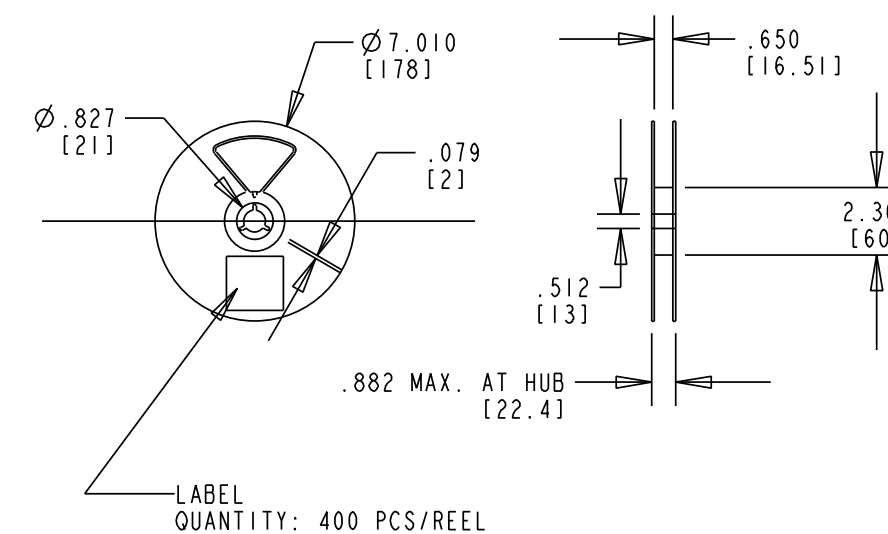


TOLERANCE: .004 UNLESS OTHERWISE SPECIFIED.  
MILLIMETER DIMENSIONS SHOWN FOR REFERENCE ONLY.

REEL SPECIFICATION



13 INCH DIA. REEL SPECIFICATIONS



7 INCH DIA. REEL SPECIFICATIONS



**ATTENTION:**  
OBSERVE PRECAUTIONS FOR  
HANDLING ELECTROSTATIC  
SENSITIVE DEVICES

RoHS COMPLIANT 591-3501-1XXF SURFACE MOUNT LED  
PART NUMBERS WITH THE "F" SUFFIX ENDING ARE RoHS COMPLIANT.  
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 10-20 SEC.

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SCALE: DRAWING SCALE	DRAWING NUMBER	REV
ALL DIM'S IN: INCHES (MM)	C-17491	A
TOLERANCES: UNLESS OTHERWISE SPECIFIED	TITLE TRI-COLOR LED RED GREEN, BLUE RoHS COMPLIANT	
FRACTIONS: ±1/64	MATERIAL	
DECIMALS (.XX): ±.01	Dialight	
DECIMALS (.XXX): ±.005	1501 ROUTE 34 SOUTH FARMINGDALE, NJ 07727	
DECIMALS (.XXXX): ±.0005	FSCM 83330	
ANGLES: ±1°	SHEET 1 OF 1 FAMILY TABLE:	