

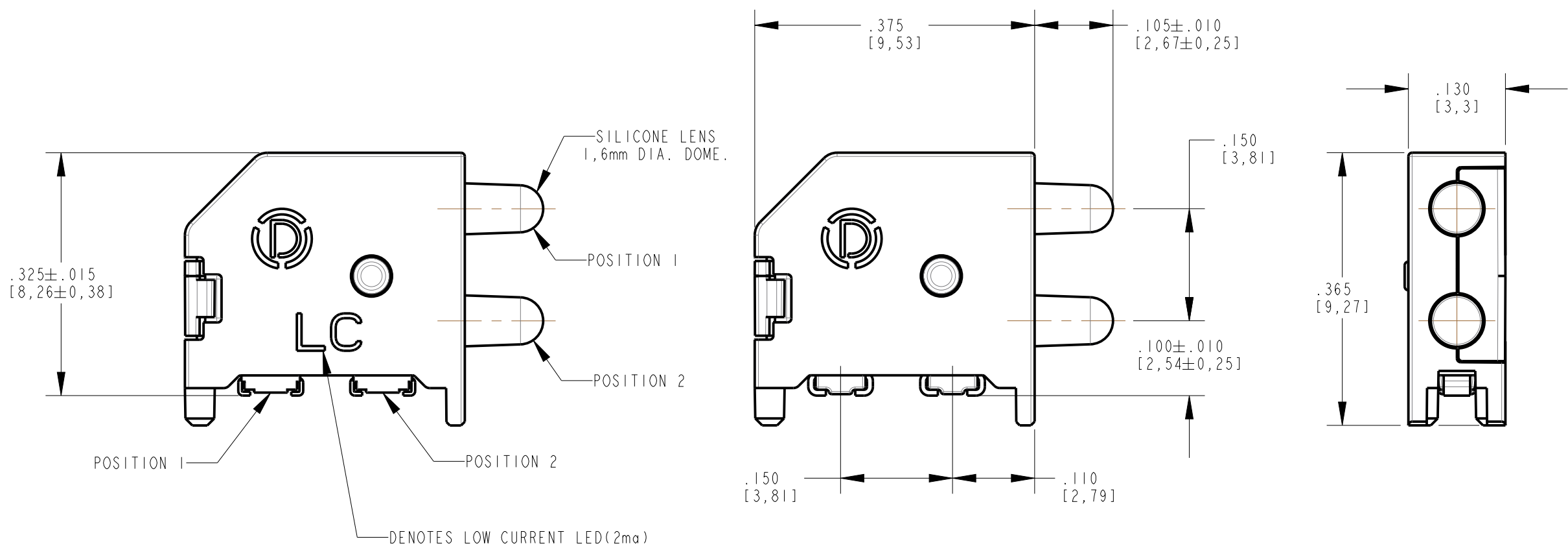
PART NUMBER	COLOR		MSL
	POSITION 1	POSITION 2	
596-2020-002F	RED	RED	3
596-2020-013F	RED	RED	3
596-2023-002F	RED	YELGRN	3
596-2023-013F	RED	YELGRN	3
596-2323-002F	YELGRN	YELGRN	3
596-2323-013F	YELGRN	YELGRN	3
596-2324-002F	YELGRN	YELLOW	3
596-2324-013F	YELGRN	YELLOW	3
596-2326-002F	YELGRN	BLUE	3
596-2326-013F	YELGRN	BLUE	3
596-2420-002F	YELLOW	RED	3
596-2420-013F	YELLOW	RED	3
596-2423-002F	YELLOW	YELGRN	3
596-2423-013F	YELLOW	YELGRN	3
596-2424-002F	YELLOW	YELLOW	3
596-2424-013F	YELLOW	YELLOW	3
596-2429-002F	YELLOW	GREEN	3
596-2429-013F	YELLOW	GREEN	3
596-2525-002F	ORANGE	ORANGE	3
596-2525-013F	ORANGE	ORANGE	3
596-2626-002F	BLUE	BLUE	3
596-2626-013F	BLUE	BLUE	3
596-2926-002F	GREEN	BLUE	3
596-2926-013F	GREEN	BLUE	3
596-2929-002F	GREEN	GREEN	3
596-2929-013F	GREEN	GREEN	3
596-1010-002F	RED - 2ma	RED - 2ma	2
596-1010-013F	RED - 2ma	RED - 2ma	2
596-1414-002F	YELLOW - 2ma	YELLOW - 2ma	2
596-1414-013F	YELLOW - 2ma	YELLOW - 2ma	2
596-1515-002F	ORANGE - 2ma	ORANGE - 2ma	2
596-1515-013F	ORANGE - 2ma	ORANGE - 2ma	2
596-1616-002F	ICE BLUE - 2ma	ICE BLUE - 2ma	2
596-1616-013F	ICE BLUE - 2ma	ICE BLUE - 2ma	2
596-1818-002F	WHITE - 2ma	WHITE - 2ma	2
596-1818-013F	WHITE - 2ma	WHITE - 2ma	2

ABSOLUTE MAXIMUM RATINGS AT 25°C FOR 20mA PARTS							
LED COLOR	POWER DISSIPATION (mW)	FORWARD CURRENT (mA)	PEAK FORWARD CURRENT (mA)	REVERSE VOLTAGE (V)	OPERATING TEMPERATURE (°C)	STORAGE TEMPERATURE (°C)	JUNCTION TEMPERATURE (°C)
RED	48	20	100	5	-40 TO +85	-40 TO +100	90
ORANGE	60		80				90
YELLOW	48		100				90
YELLOW GREEN	48		100				90
GREEN	70		100				95
BLUE	70		100				95

OPERATING CHARACTERISTICS AT 25°C FOR 20mA PARTS											
LED COLOR	LUMINOUS INTENSITY (mcd) @ IF=10 mA			DOMINANT WAVELENGTH (nm)			REVERSE CURRENT	FORWARD VOLTAGE IF=20mA		VIEWING ANGLE (DEG) @ 50% IV	THERMAL RESISTIVITY (°C/W)
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.		MAX.	TYP.		
RED		35			625		10µA @ VR=5V	1.8	2.4	30	290
ORANGE		17			605			1.8	2.4		290
YELLOW		20			590			1.8	2.4		290
YELLOW GREEN		3			570			1.8	2.4		290
GREEN		140			525			2.8	3.5		110
BLUE		25			470			2.8	3.3		110

ABSOLUTE MAXIMUM RATINGS AT 25°C FOR 2mA PARTS						
LED COLOR (nm)	FORWARD CURRENT (mA)	SURGE CURRENT (mA) t<10µs; D = .005	REVERSE VOLTAGE (V)	OPERATING TEMPERATURE (°C)	STORAGE TEMPERATURE (°C)	JUNCTION TEMPERATURE (°C)
RED (630)	20	100	12	-40 TO +100	-40 TO +100	+100
ORANGE (606)	20	100				
YELLOW (588)	20	100				
ICE BLUE	15	150	5			
WHITE	20	200	5			

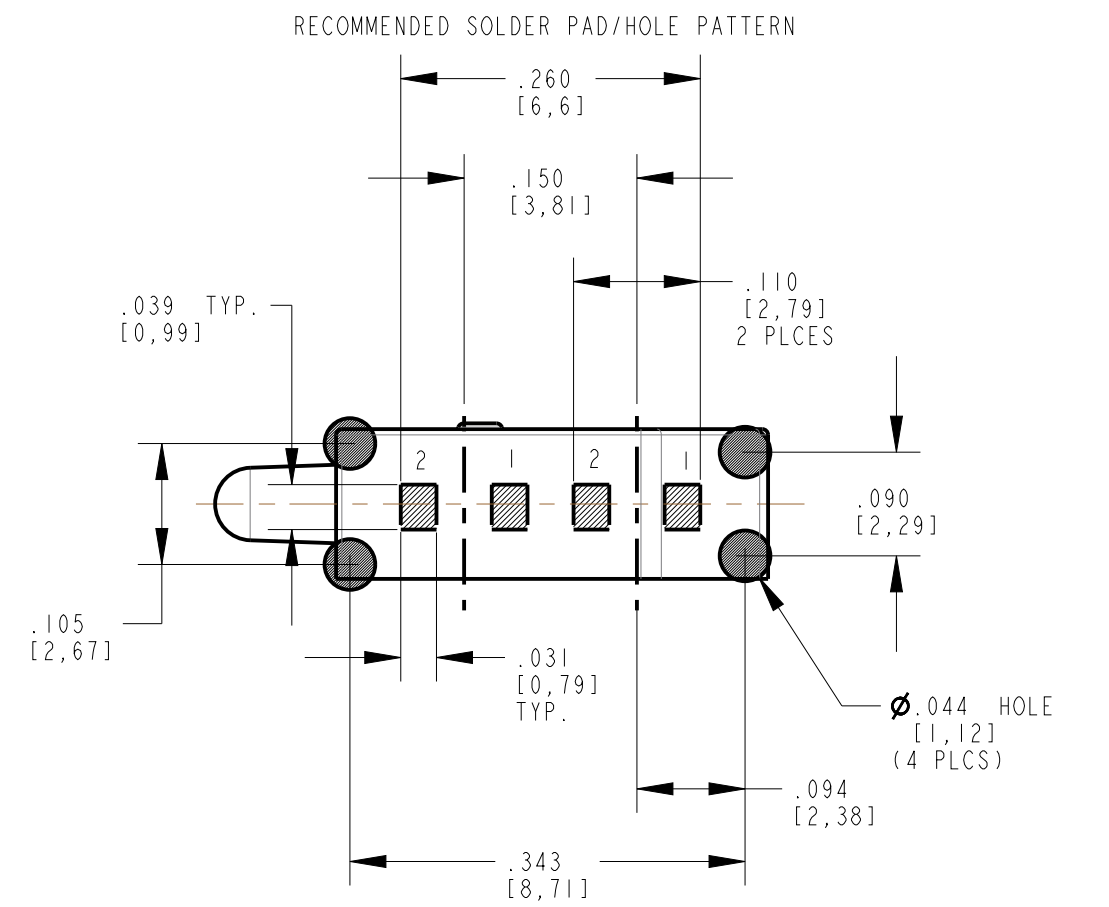
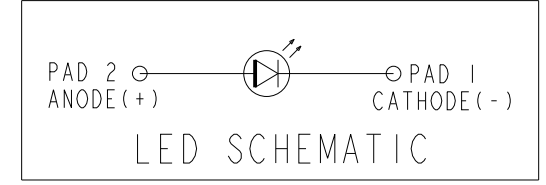
OPERATING CHARACTERISTICS AT 25°C 2mA PARTS														
LED COLOR (nm)	CHROMACITY COORDINATE		LUMINOUS INTENSITY (mcd) @ IF=10 mA			DOMINANT WAVELENGTH (nm)			REVERSE CURRENT	FORWARD VOLTAGE IF=2mA			VIEWING ANGLE (DEG) @ 50% IV	THERMAL RESISTIVITY (°C/W)
	Cx	Cy	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.		MAX.	MIN.	TYP.		
RED (630)				6.0		624	630	636	10µA @ VR=12V	1.7	1.8	2.2	30	R,O,Y +280 B,W +230
ORANGE (606)				5.5		600	606	609		1.7	1.8	2.2		
YELLOW (588)				5.0		580	587	595		1.7	1.8	2.2		
ICE BLUE	0.2	0.3		6.5					10µA @ VR=5V	2.5	2.75	3.1		
WHITE	.33	.33		9.3					10µA @ VR=5V	2.5	2.75	3.1		



REV	REVISIONS	DRN	APP	DATE
A	NEW RELEASE	JGL		01/31/2020
B	REMOVED 7" REEL/PART NUMBERS	JGL		9/03/2020
C	LUMINOUS INT & QUANTITY ADDED	LD	NO	01/27/2021
D	ADDED COLOR BLUE AND ITS VALUES	LD	NO	3/04/2021

- 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
 - ...-002F SUFFIX MEANS PARTS ARE PACKED ON A 10 pc SAMPLE STRIP
...-013F SUFFIX MEANS PARTS ARE PACKED ON A 13 INCH REEL , 500 pcs/REEL
 - FRONT AND REAR TERMINALS OF THE ASSEMBLY TO BE WITHIN .005 COPLANARITY
 - DIALIGHT PART NUMBERS FOR 20mA AND 2mA PARTS, 596-2X2X-0XXF; 596-1X1X-0XXF
 - DRY PACK PACKAGING CONSIST OF A DESICCANT, HUMIDITY INDICATOR CARD IN A VACUUM SEALED MOISTURE BARRIER BAG, MOISTURE SENSITIVITY LABEL LEVEL 2 ON OUTSIDE OF BAG, AS PER JEDEC STD. 033 FOR 2mA PARTS. MSL3 FOR 20mA PARTS.
 - ATTENTION: OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES.

ATTENTION:
OBSERVE PRECAUTIONS FOR
HANDLING ELECTROSTATIC
SENSITIVE DEVICES



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DIALIGHT CORP INTERNAL REFERENCE ONLY - 3D MODEL : 596212XXXX-A-16

SCALE: 6.000 DRAWING NUMBER: C-18463 REV: D

TOLERANCES: UNLESS OTHERWISE SPECIFIED
 FRACTIONS: ±1/64
 DECIMALS (.XX): ±.01
 DECIMALS (.XXX): ±.005
 DECIMALS (.XXXX): ±.0005
 ANGLES: ±1°

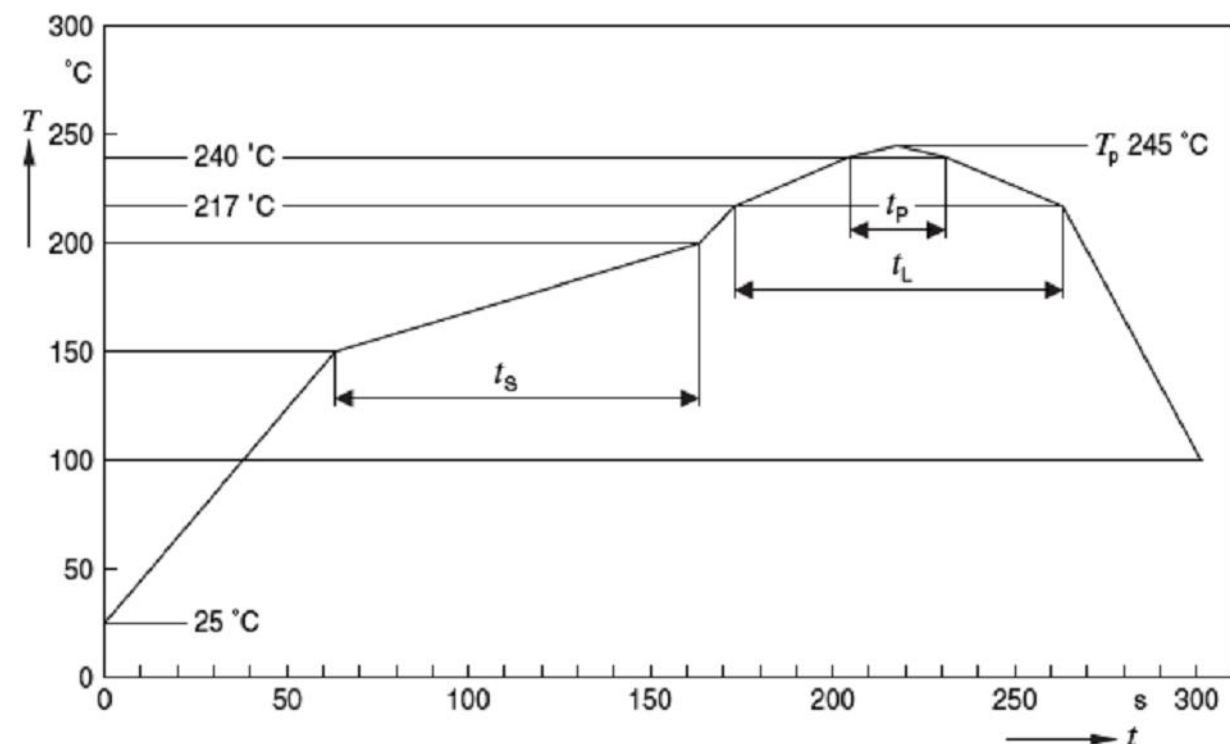
TITLE: 1,6MM BI-LEVEL PRISM
 MATERIAL: -

FINISH: -

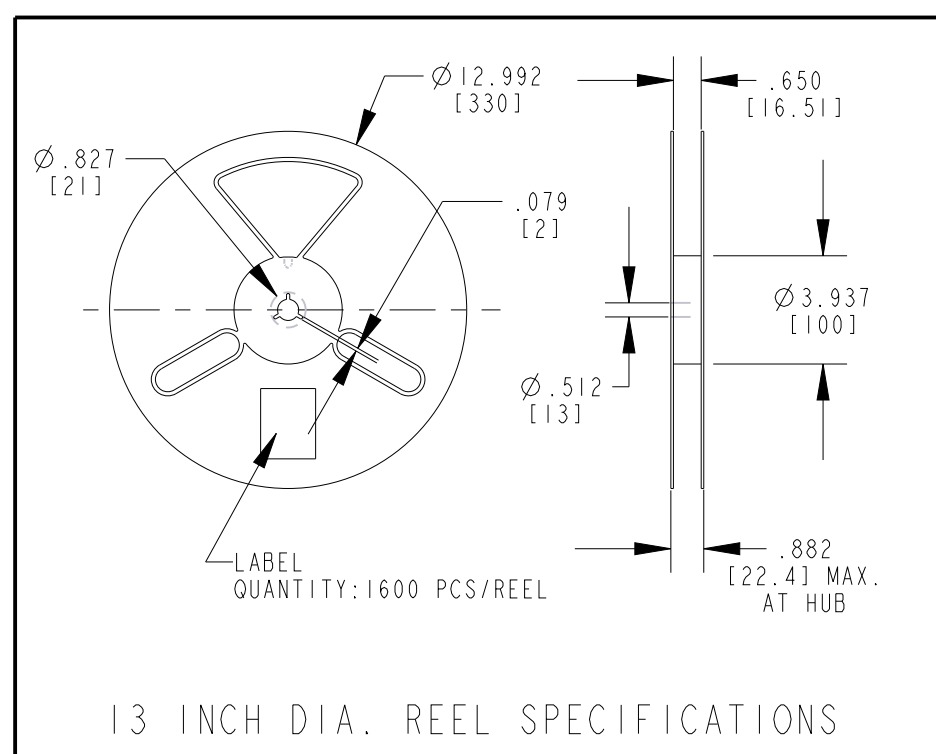
FSCM 83330 SHEET 1 OF 2 FAMILY TABLE:

Dialight 1501 ROUTE 34 SOUTH FARMINGDALE, NJ 07727 (732) 919-3119 www.dialight.com

2mA LED
RECOMMENDED RoHS SOLDER PROFILE

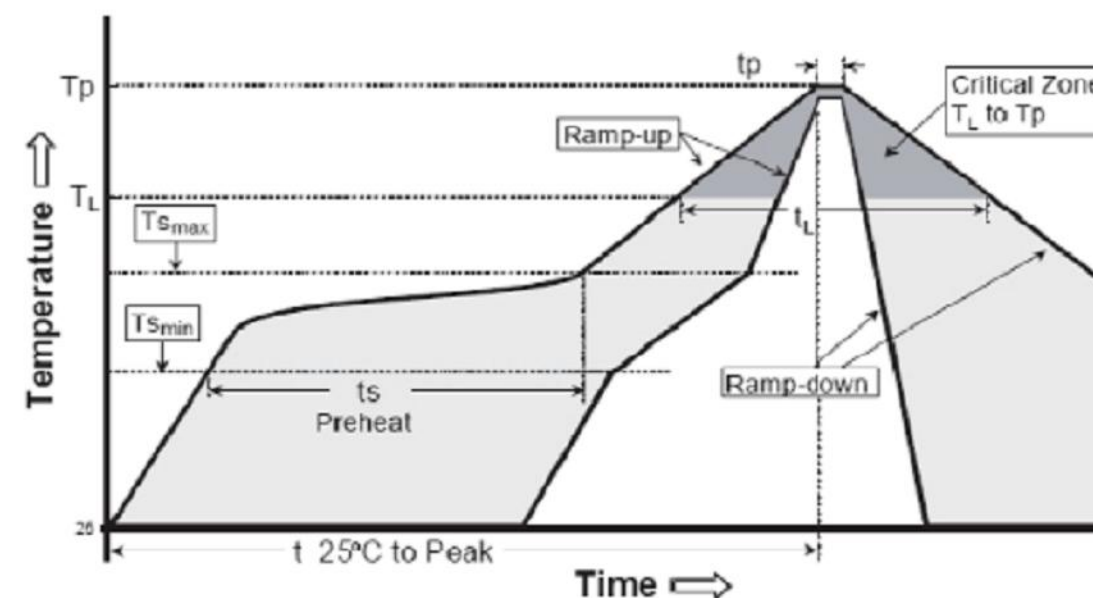


MARK	DEFINITION	CONDITION
T _{Smax}	Maximum of pre-heating temperature	200 °C
T _{Smin}	Minimum of pre-heating temperature	150 °C
T _s	Time form T _{Smin} to T _{Smax}	60-120 sec
T _L	Reference temperature	217 °C
t _L	Retention time for T _L	within 80s
T _p	Peak Temperature	245 °C
t _p	Time for peak temperature	within 20s
DTr/Dt	Temperature rising rate	under 3° C/sec
DTd/Dt	Temperature decreasing rate	under -3° C/sec
t	25°C to t _p	480s

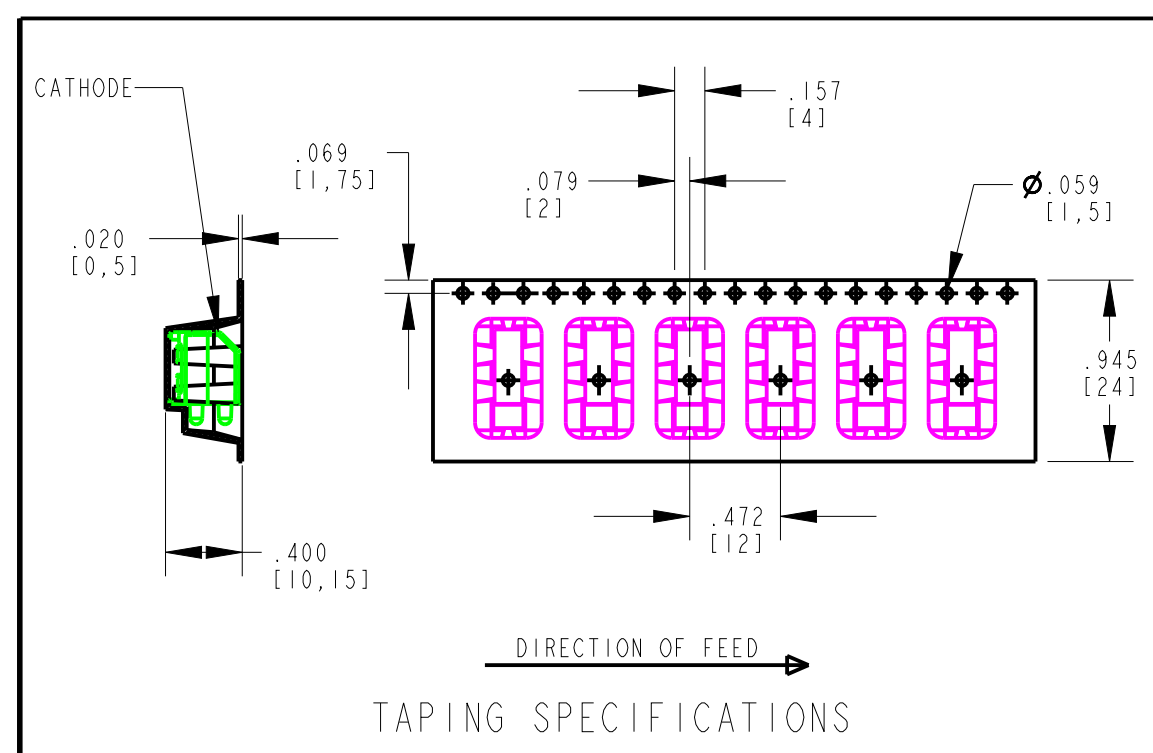


20mA LED
RECOMMENDED RoHS SOLDER PROFILE

SMT Reflow Soldering Instructions SMT



MARK	DEFINITION	CONDITION
T _{Smax}	Maximum of pre-heating temperature	200 °C
T _{Smin}	Minimum of pre-heating temperature	150 °C
T _s	Time form T _{Smin} to T _{Smax}	60-120 sec
T _L	Reference temperature	217 °C
t _L	Retention time for T _L	within 60s
T _p	Peak Temperature	260 °C
t _p	Time for peak temperature	within 10s
DTr/Dt	Temperature rising rate	under 3° C/sec
DTd/Dt	Temperature decreasing rate	under -3° C/sec
t	25°C to t _p	480s



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DIALIGHT CORP. INTERNAL REFERENCE ONLY - 3D MODEL: 396212XXXX-A.16		
SCALE: 6.000	DRAWING NUMBER	REV
ALL DIM'S IN: INCHES (MM)	C-18463	D
TOLERANCES: UNLESS OTHERWISE SPECIFIED	TITLE	
FRACTIONS: ±1/64	1,6MM BI-LEVEL PRISM	
DECIMALS (.XX): ±.01	MATERIAL	
DECIMALS (.XXX): ±.005		
DECIMALS (.XXXX): ±.0005		
ANGLES: ±1°		
FINISH	Dialight	
FSCM 83330	1501 ROUTE 34 SOUTH FARMINGDALE, NJ 07727 (732) 919-3119 www.dialight.com	
SHEET 2 OF 2	FAMILY TABLE:	