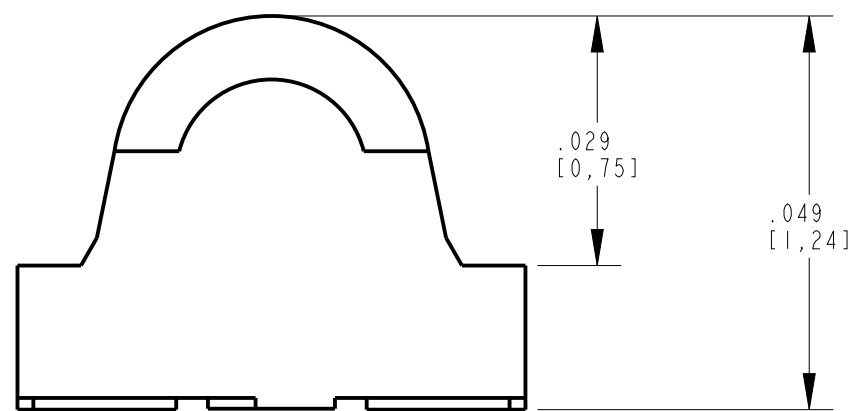
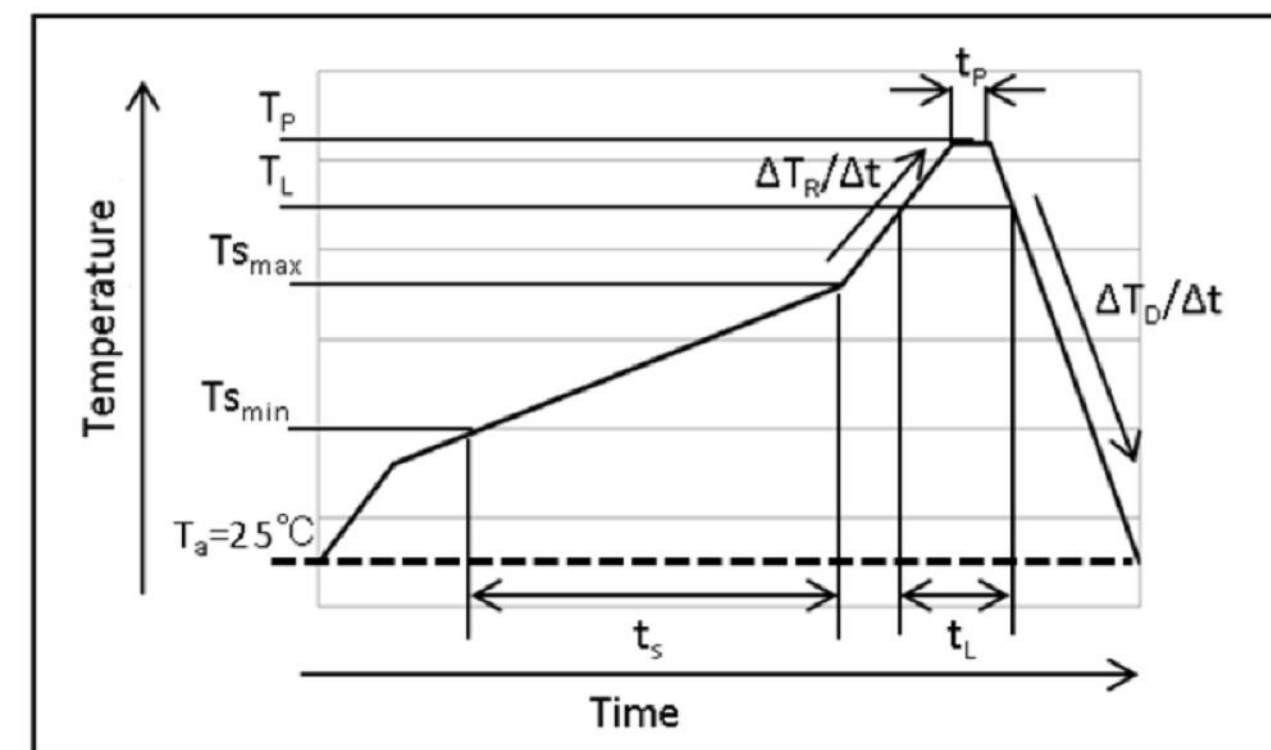
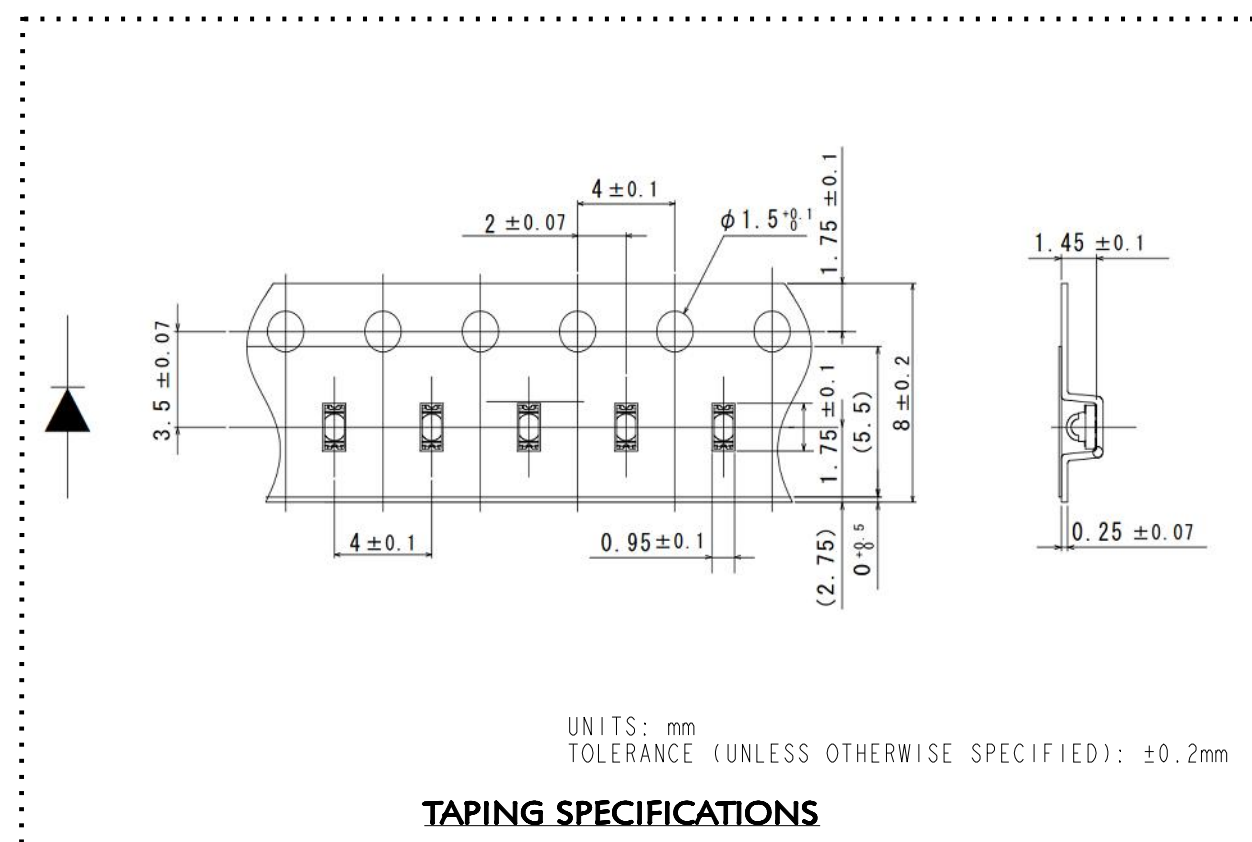
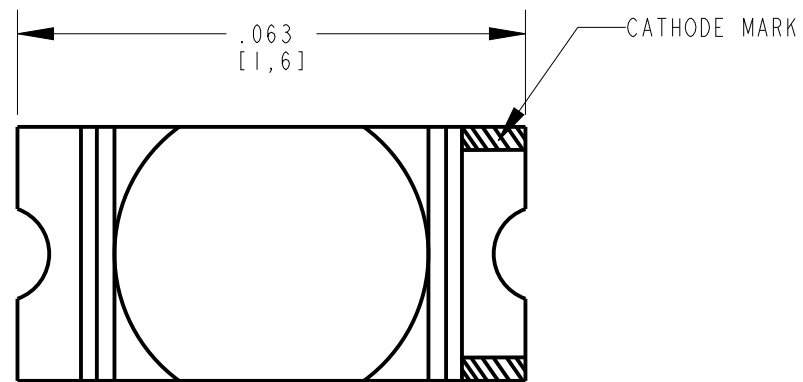


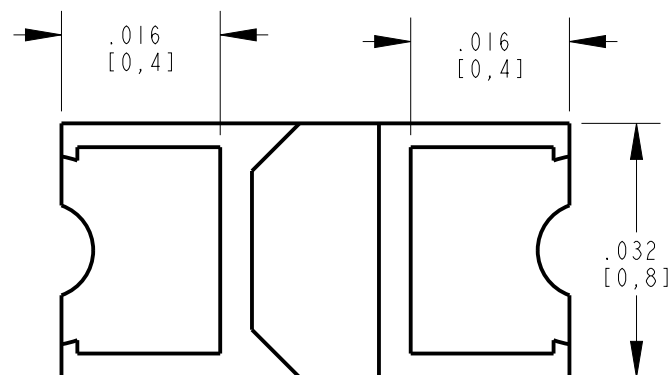
PART NUMBER	LED COLOR
597-3006-502F, 507F	RED (630nm)
597-3036-502F, 507F	RED (620nm)
597-3206-502F, 507F	ORANGE
597-3408-502F, 507F	YELLOW (590nm)
597-3409-502F, 507F	YELLOW (587nm)
597-3506-502F, 507F	YELLOW-GREEN
597-3316-502F, 507F	GREEN (560nm)

REV	REVISIONS	DRN	APP	DATE
A	NEW RELEASE	BP	NO	4-2-18
B	ADDED 60° VIEW ANGLE ON THE TITLE BOX	LD	NO	9-27-18
C	ADDED VIEWING ANGLE	LD	NO	7-24-19



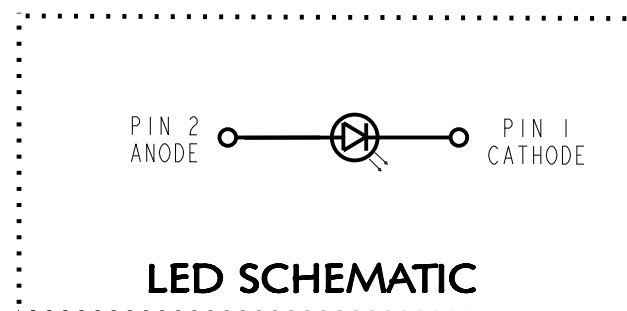
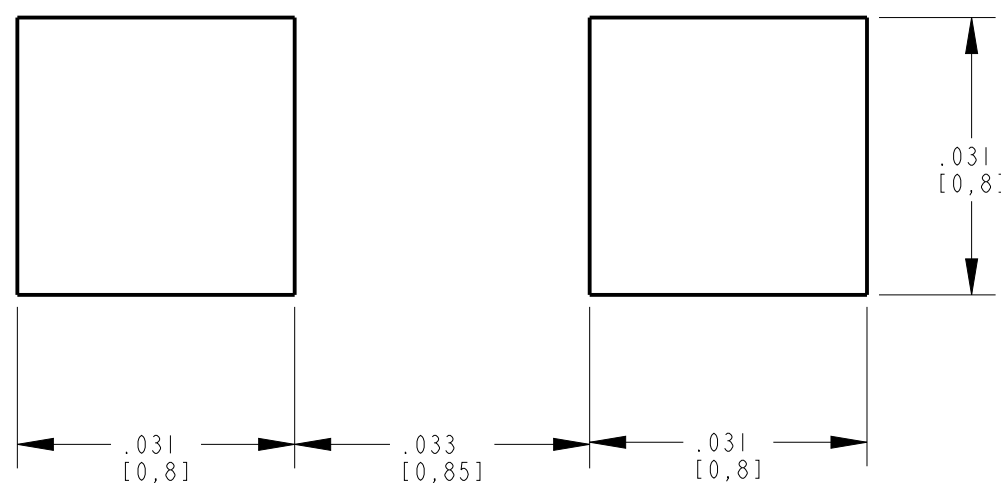
ABSOLUTE MAXIMUM RATINGS AT 25°C						
LED COLOR	POWER DISSIPATION (mW)	FORWARD CURRENT (mA)	PEAK FORWARD CURRENT (mA)	REVERSE VOLTAGE (V)	OPERATING TEMPERATURE (°C)	STORAGE TEMPERATURE (°C)
RED (630nm)	50	20	100	12	-40 TO +100	-40 TO +100
RED (620nm)						
ORANGE						
YELLOW (590nm)						
YELLOW (587nm)						
YELLOW-GREEN						
GREEN						

MARK	MEANING	CONDITIONS
T <sub>s_max</sub>	MAXIMUM OF PRE-HEATING TEMP.	180 °C
T <sub>s_min</sub>	MINIMUM OF PRE-HEATING TEMP.	140 °C
t <sub>s</sub>	TIME FROM T <sub>s_min</sub> TO T <sub>s_max</sub>	OVER 60 sec.
T <sub>L</sub>	REFERENCE TEMP	230-260 °C
t <sub>L</sub>	RETENTION TIME FOR T <sub>L</sub>	WITHIN 40 sec.
T <sub>P</sub>	PEAK TEMP	260 °C (MAX)
t <sub>P</sub>	TIME FOR PEAK TEMP	WITHIN 10 sec.
ΔT <sub>R</sub> /Δt	TEMP. RISING RATE	UNDER 3°C/sec.
ΔT <sub>D</sub> /Δt	TEMP. DECREASING RATE	OVER -3°C/sec.



OPERATING CHARACTERISTICS AT 25°C										
LED COLOR	IF (mA)	LUMINOUS INTENSITY (mcd)			DOMINANT WAVELENGTH (nm)			REVERSE CURRENT (MAX)	FORWARD VOLTAGE (TYP.)	VIEWING ANGLE (degrees) (TYP)
		MIN.	TYP.	MAX.	MIN.	TYP.	MAX.			
RED (630nm)	20	—	174	—	—	630	—	10 @ VR=12V	2 @ IF=20mA	60
RED (620nm)		—	185	—	—	620	—			
ORANGE		—	405	—	—	605	—			
YELLOW (590nm)		—	320	—	—	590	—			
YELLOW (587nm)		—	290	—	—	587	—			
YLW GREEN		—	140	—	—	571	—			
GREEN	—	34	—	—	560	—				

**RECOMMENDED RoHS SOLDER PROFILE**



**NOTES:**

- DIALIGHT P/N: 597-3XXX-50XF  
SUFFIX -502F FOR 20 PCS ON A SAMPLE TAPE STRIP  
SUFFIX -507F FOR 7" DIAMETER REEL, PACKAGED 2000 PCS PER REEL.
- LABELING FOR REEL AND OUTSIDE OF ALUMINUM FOIL BAG:  
DIALIGHT P/N, QUANTITY PER REEL, DATE CODE, INTENSITY BIN CODE, LOT NUMBER AND COUNTRY OF ORIGIN.
- TAPE AND REEL LEDS MAY REQUIRE RE-TAPING AFTER TWELVE MONTHS.
- ESD WITHSTAND VOLTAGE UP TO 6KV MAX ACC. TO JS-001-2014
- MSL 3

**RECOMMENDED SOLDER PAD LAYOUT**



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

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DIALIGHT CORP. INTERNAL REFERENCE ONLY = 3D MODEL = 597506507F-0		
SCALE: 25.000	DRAWING NUMBER	REV
ALL DIM'S IN: INCHES (MM)	<b>C-18371</b>	<b>C</b>
TOLERANCES: UNLESS OTHERWISE SPECIFIED	TITLE	
FRACTIONS: ±1/64	SM LED 0603 PACKAGE, 60° VIEW ANGLE	
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 1 OF 1	FAMILY TABLE:	