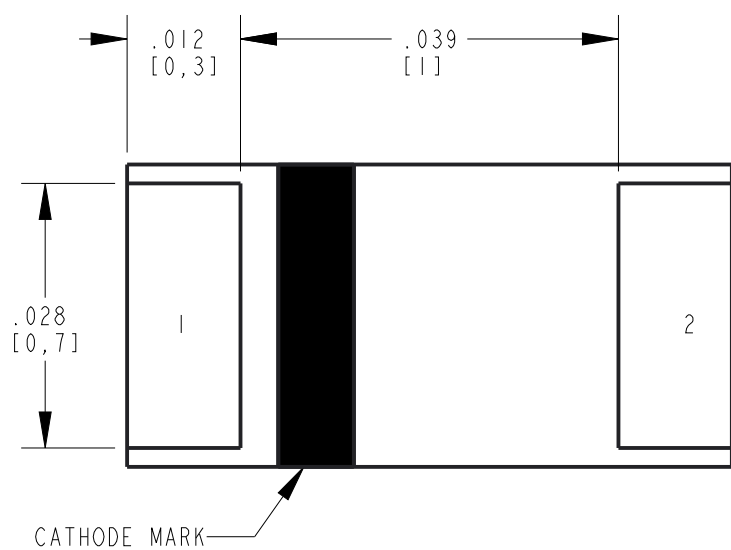
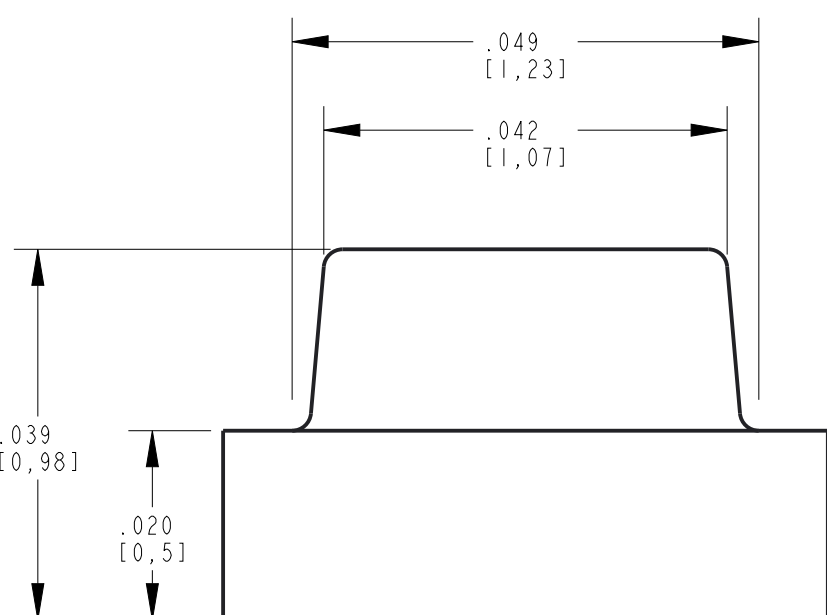
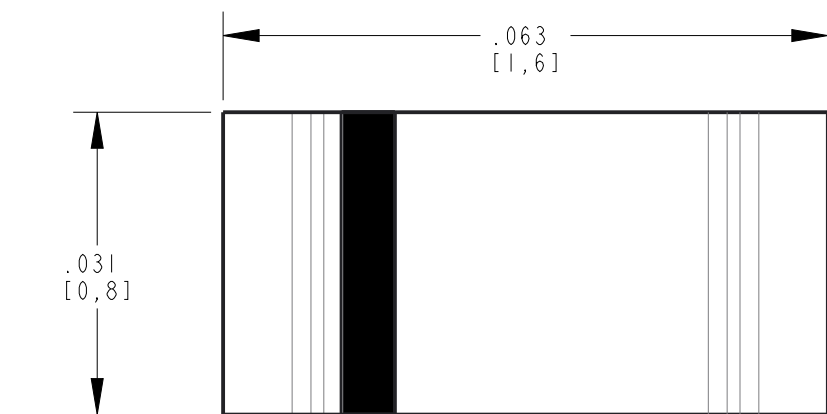


DIALIGHT PART NO	LED COLOR (nm)
598-8D10-102F,107F	RED (630)
598-8D20-102F,107F	RED ORANGE (625)
598-8D30-102F,107F	ORANGE (605)
598-8D40-102F,107F	YELLOW (590)
598-8D60-102F,107F	YELLOW GREEN (570)
598-8D80-102F,107F	GREEN (525)
598-8D90-102F,107F	BLUE (470)

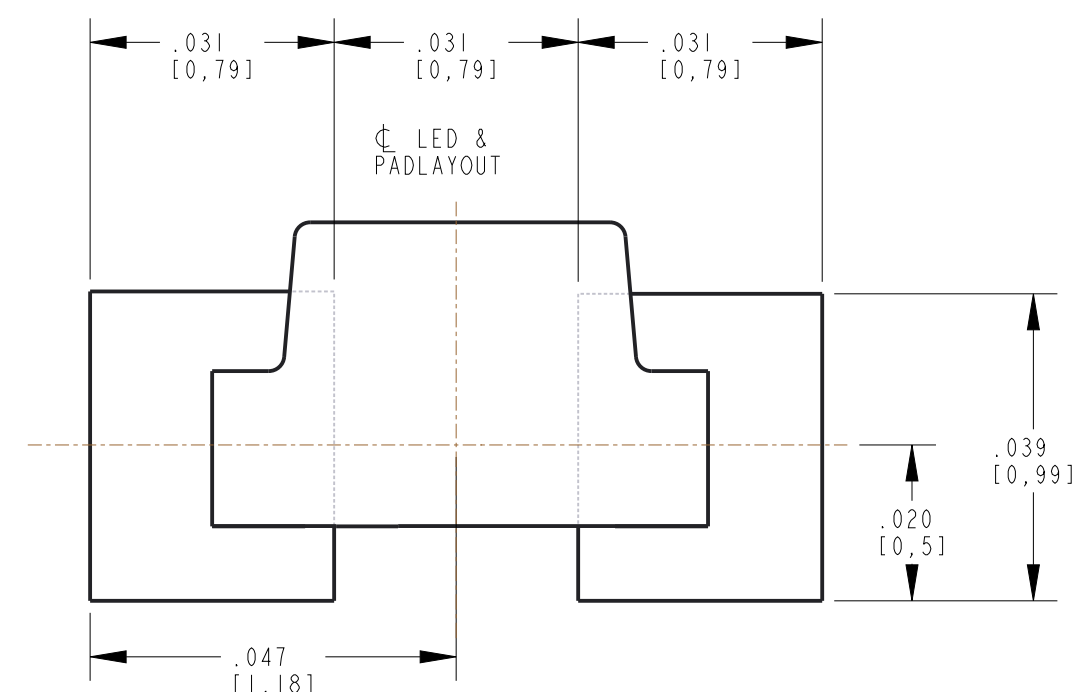


**ATTENTION:**  
OBSERVE PRECAUTIONS FOR  
HANDLING ELECTROSTATIC  
SENSITIVE DEVICES

REV	REVISIONS	DRN	APP	DATE
A	NEW RELEASE	LD	NO	9-24-19
B	CHANGED THE FOLLOWING DIMS: .049 WAS 1.10 & .042 WAS 1.00, ADDED TOP VIEW CATHODE MARK	LD	NO	11-17-19
C	CHANGED THE WAVELENGTH OF 598-8D20-102F,107F FROM 615nm TO 625nm	LD	NO	2-12-21
D	REVISED PAD LAYOUT	LD	CS	5-24-23



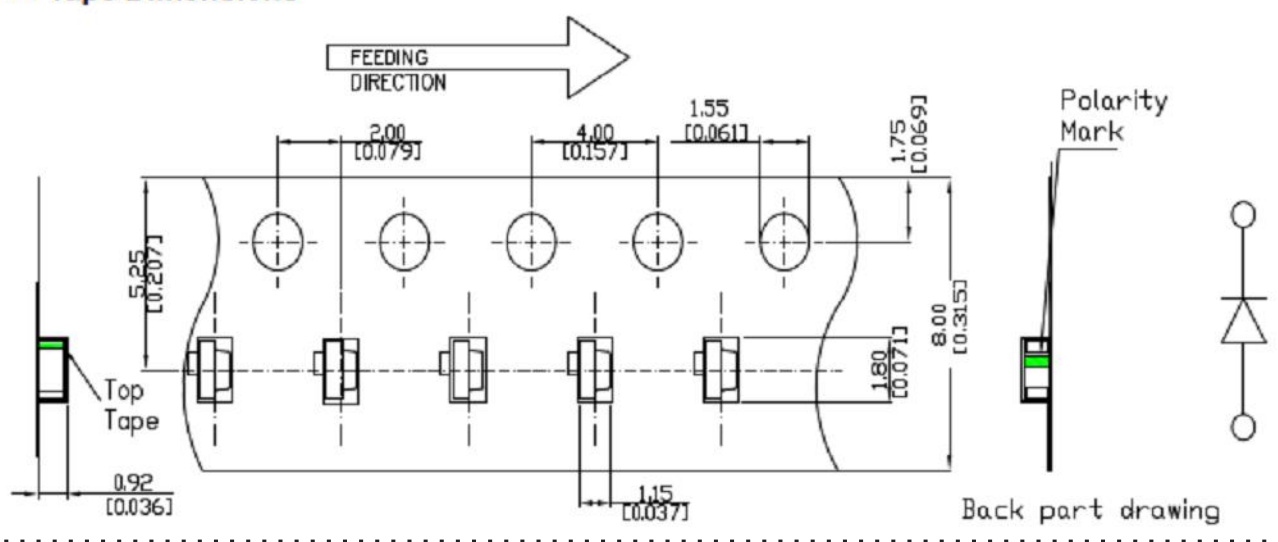
**RECOMMENDED PAD LAYOUT**



**TAPING SPECIFICATIONS**

UNITS: mm  
TOLERANCE (UNLESS OTHERWISE SPECIFIED): ±0.2mm

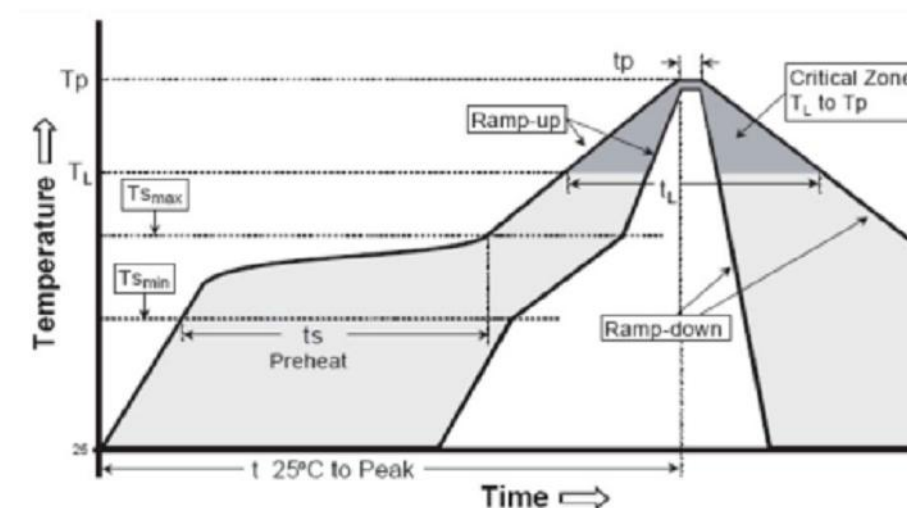
**■ Tape Dimensions**



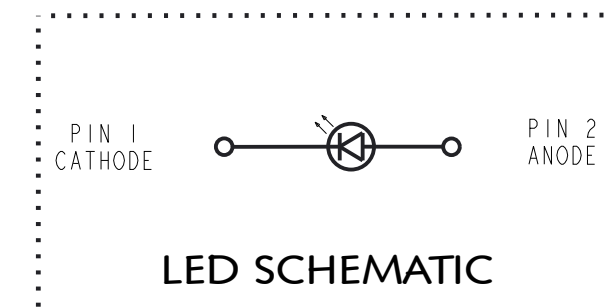
ELECTRICAL OPTICAL CHARACTERISTICS AT 25°C													
LED COLOR	TEST CONDITION	LUMINOUS INTENSITY (mcd)			DOMINANT WAVELENGTH (nm)			REVERSE CURRENT (µA)	SPECTRAL LINE HALF-WIDTH (nm)	FORWARD VOLTAGE (IF=5mA)		VIEWING ANGLE (IF=20mA)	THERMAL RESISTANCE (IF=20mA) (°C/W)
		MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	MAX.	TYP.	TYP.	MAX.	TYP.	MAX.
RED	20	30	—	90	630	635	640	10	15	1.8	2.4	140	450
RED ORANGE		150	240	330	620	625	630			1.8	2.4		
ORANGE		90	145	200	600	605	610			1.8	2.4		
YELLOW		120	160	200	585	590	595			1.8	2.4		
YELLOW GREEN		28	54	80	565	570	575			1.8	2.4		
GREEN		70	135	200	510	525	535			2.8	3.5		
BLUE		350	440	530	460	468	475			2.8	3.5		

ABSOLUTE MAXIMUM RATINGS AT 25°C								
LED COLOR	POWER DISSIPATION (mW)	FORWARD CURRENT (mA)	PEAK FORWARD CURRENT (mA)	ELECTROSTATIC DISCHARGE (V)	OPERATING TEMPERATURE (°C)	STORAGE TEMPERATURE (°C)	SOLDERING CONDITION (°C)	JUNCTION TEMPERATURE (°C)
RED	72	30	60	2000	-40 to +85	-40 to +100	260	95
RED ORANGE								
ORANGE								
YELLOW								
YELLOW GREEN	105	20	1000	-40 to +85	-40 to +100	260	95	
GREEN								
BLUE	70	20						

**RECOMMENDED RoHS SOLDER PROFILE**



MARK	DEFINITION	CONDITION
T <sub>Smax</sub>	Maximum of pre-heating temperature	200 °C
T <sub>Smin</sub>	Minimum of pre-heating temperature	150 °C
T <sub>s</sub>	Time form T <sub>Smin</sub> to T <sub>Smax</sub>	60-120 sec
T <sub>L</sub>	Reference temperature	217 °C
t <sub>L</sub>	Retention time for T <sub>L</sub>	within 60s
T <sub>P</sub>	Peak Temperature	260 °C
t <sub>p</sub>	Time for peak temperature	within 10s
DTr/Dt	Temperature rising rate	under 6° C/sec
DTd/Dt	Temperature decreasing rate	under -3° C/sec

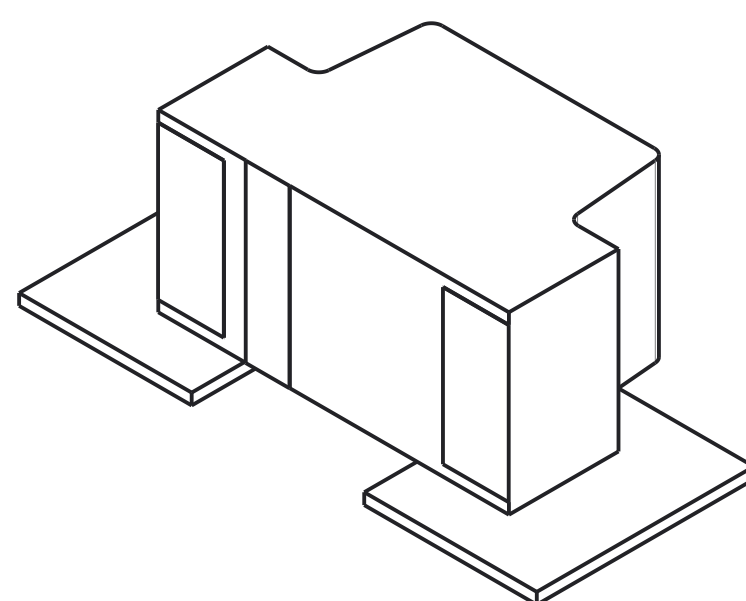


**LED SCHEMATIC**

**NOTES:**

- QUANTITY IS 4,000 PCS PER REEL.
- PIN NUMBERS ARE FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PART.
- THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING AND STORAGE IN ACCORDANCE WITH IPC-A-610.
- THIS PRODUCT IS RoHS COMPLIANT. EACH BAG IS TO BE MARKED WITH RoHS COMPLIANT LABEL OR EQUIVALENT MARKINGS. LED MUST BE Pb FREE.

THIS DRAWING AND THE CONTENTS HEREIN ARE CONFIDENTIAL AND THE SOLE PROPERTY OF DIALIGHT CORP. REPRODUCTION OF THIS DRAWING OR CONSTRUCTION OF ANY PARTS WITHIN THIS DRAWING ARE FORBIDDEN WITHOUT THE WRITTEN CONSENT OF DIALIGHT CORP.		
DIALIGHT CORP INTERNAL REFERENCE ONLY - 3D MODEL: 4500521848X15-A-1		
SCALE: 35.00	DRAWING NUMBER	REV
ALL DIM'S IN: INCHES (MM)	C18447	D
TOLERANCES: UNLESS OTHERWISE SPECIFIED	TITLE	0603 RT ANGLE
FRACTIONS: ±1/64	MATERIAL	
DECIMALS (.XX): ±.01		
DECIMALS (.XXX): ±.005		
DECIMALS (.XXXX): ±.0005		
ANGLES: ±1°		
FINISH		
FSCM 83330	1501 ROUTE 34 SOUTH FARMINGDALE, NJ 07727 (732) 919-3119 www.dialight.com	
SHEET 1 OF 1	FAMILY TABLE:	



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Dialight:](#)

[598-8D80-107F](#) [598-8D40-107F](#) [598-8D20-107F](#) [598-8D90-107F](#) [598-8D30-107F](#) [598-8D60-107F](#) [598-8D10-107F](#)