



1209 Package Side View 850nm With Dome Lens

PART NUMBER:
599-2ECO-147IRF

DIMENSIONS:
3.2 x 2.55 x 1.6mm

LENS COLOR:
Clear

LENS MATERIAL:
Epoxy

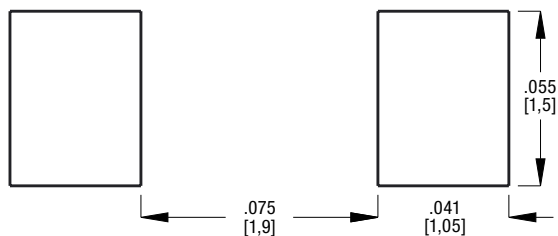
STANDARD PACKAGING:
2000/reel

MOISTURE SENSITIVITY LEVEL:
2a

CERTIFICATIONS & RATINGS

RoHS Compliant

RECOMMENDED PAD LAYOUT

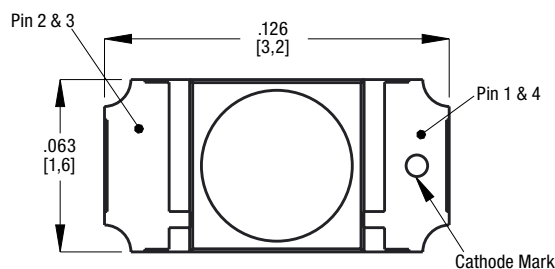


LED SCHEMATIC

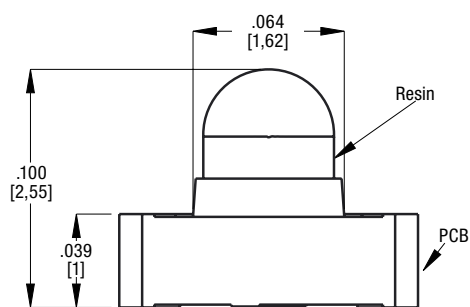


DIMENSIONS inches [mm]

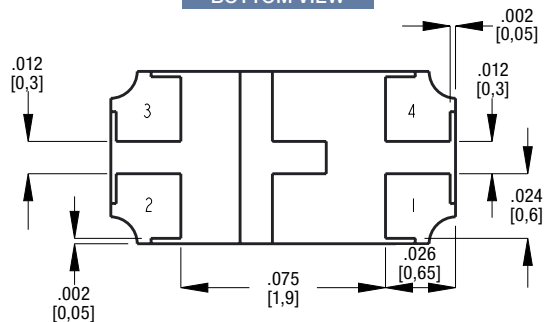
TOP VIEW



SIDE VIEW



BOTTOM VIEW



ABSOLUTE MAXIMUM RATINGS AT 25°C

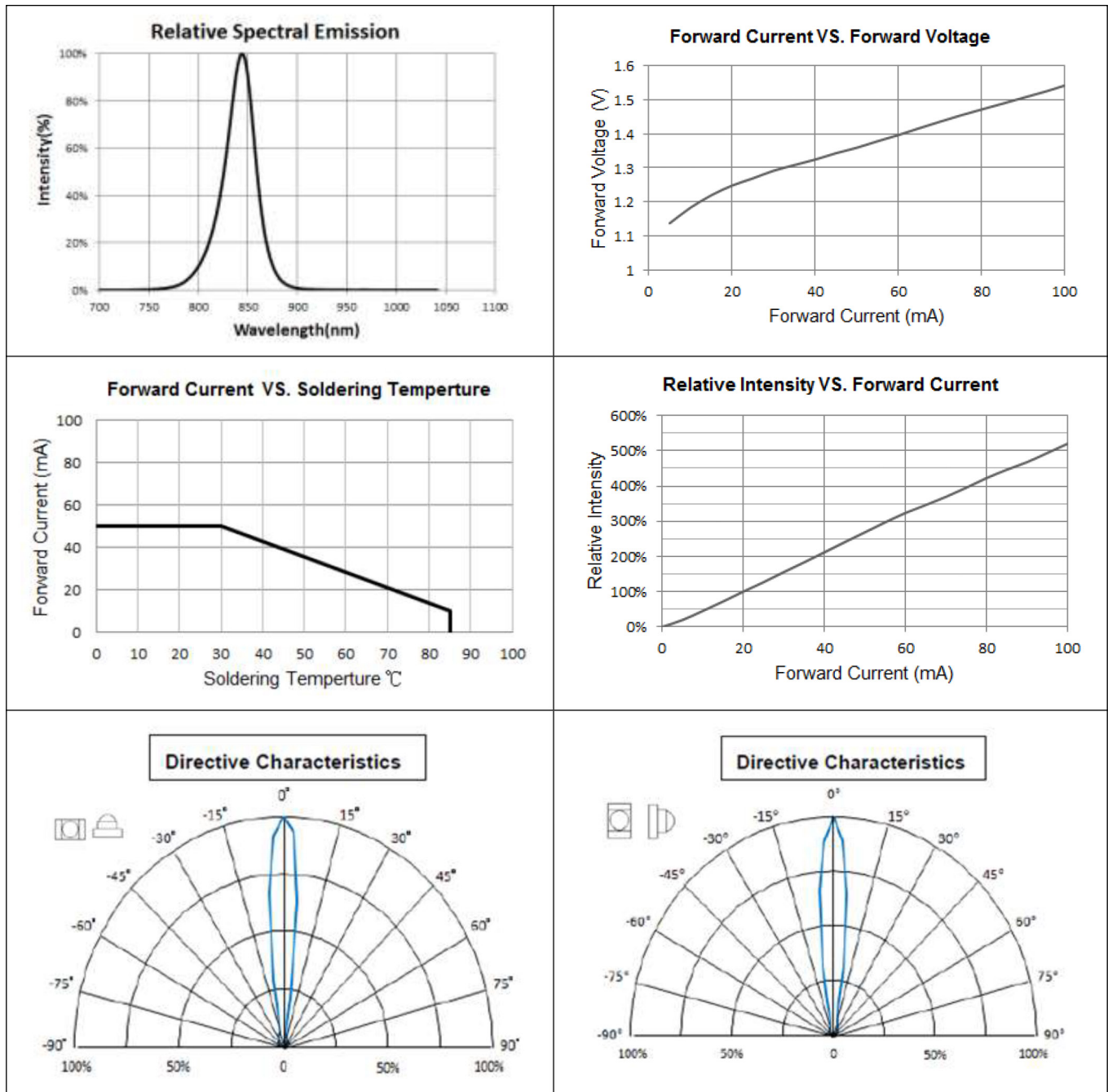
Symbol	Parameter	Ratings	Units	Notes
I_F	Forward Current	50	mA	
I_{FP}	Peak Current	500	mA	1
V_R	Reverse Voltage	5	V	
T_{opr}	Operating Temperature	-40~+85	°C	
T_{stg}	Storage Temperature	-40~+100	°C	
T_{sol}	Soldering Temperature	260	°C	2

Notes:
1. IFP Conditions — Pulse Width ≤ 100μs and Duty ≤ 1%.
2. Soldering time ≤ 5 seconds.

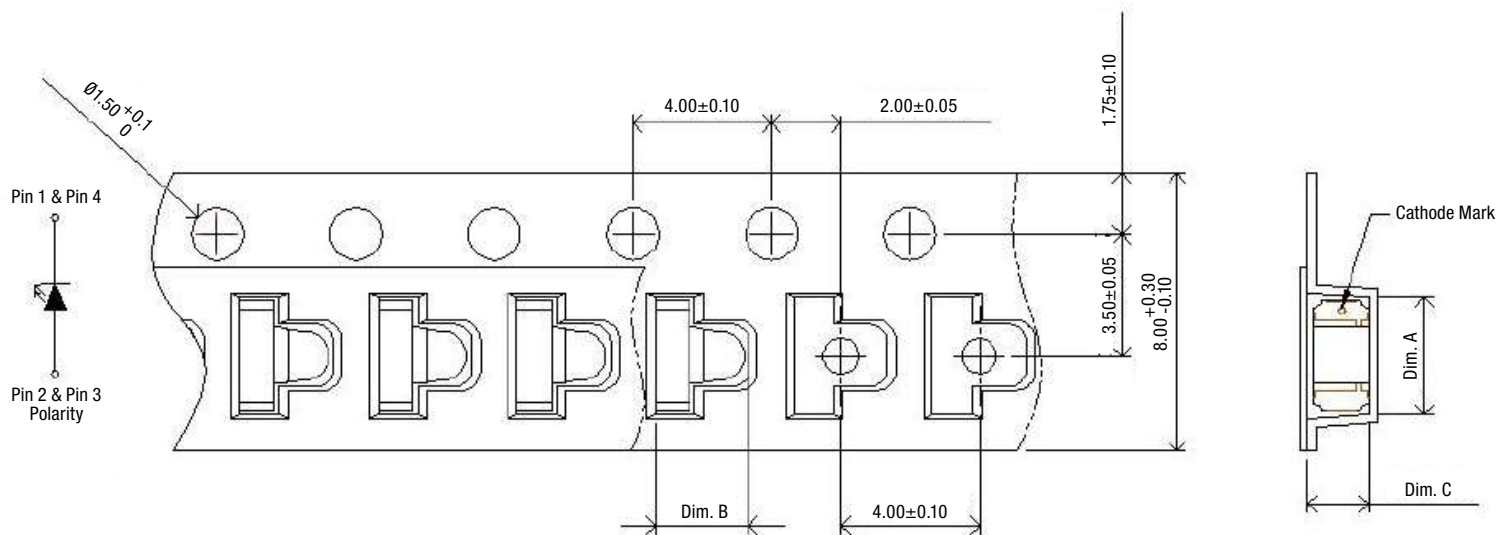
ELECTRICAL - OPTICAL CHARACTERISTICS

Symbol	Parameters	Test Conditions	Min	Typ	Max	Unit
I_e	Radiant Intensity	$I_F=20mA$	7.5	11	15	mW/sr
λ_p	Peak Wavelength	$I_F=20mA$	-	850	-	nm
$\Delta\lambda$	Spectral bandwidth at 50% of I_{max}	$I_F=20mA$		30	-	nm
V_F	Forward Voltage	$I_F=20mA$	1.2	1.45	2.0	V
I_R	Reverse Current	$V_R=5V$	-	-	10	μA
$2\theta_{\frac{1}{2}}$	Angle of Half Intensity (X)	$I_F=20mA$	-	20	-	deg
	Angle of Half Intensity (Y)		-	20	-	

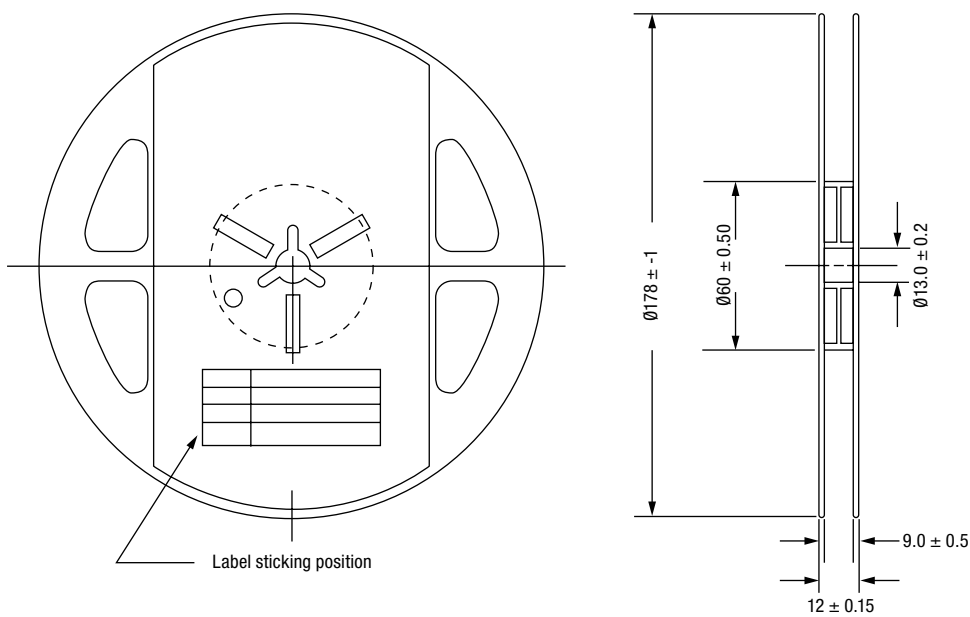
TYPICAL ELECTRICAL-OPTICAL CHARACTERISTICS



TAPE AND REEL SPECIFICATION



Dim A	Dim B	Dim C	Quantity/Reel
3.30±0.10	1.70±0.10	2.2±0.10	2K



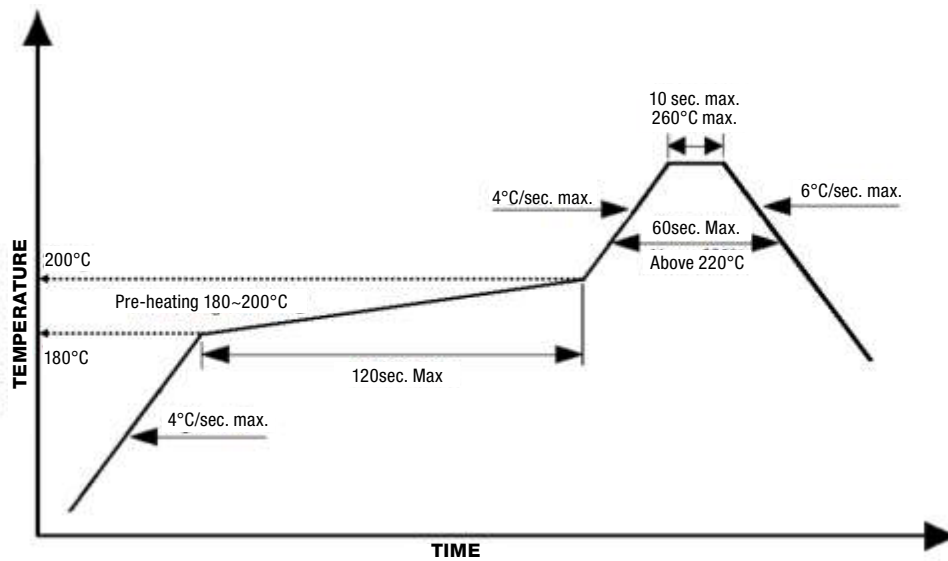
Unit: mm

REFLOW SOLDERING

Recommended soldering paste specifications:

1. Operating temp.: Above 220°C, 60sec.
2. Peak temp.: 260°C Max., 10sec Max.
3. Reflow soldering should not be done more than two times.

LEAD-FREE SOLDER PROFILE



Dialight reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.dialightsignalsandcomponents.com

Warranty Statement: Except for the warranty expressly provided for at: www.dialight.com/resources/warranties/, Dialight disclaims any and all other warranties, express or implied, including, without limitation, any warranties of merchantability, fitness for a particular purpose, title, and noninfringement.