



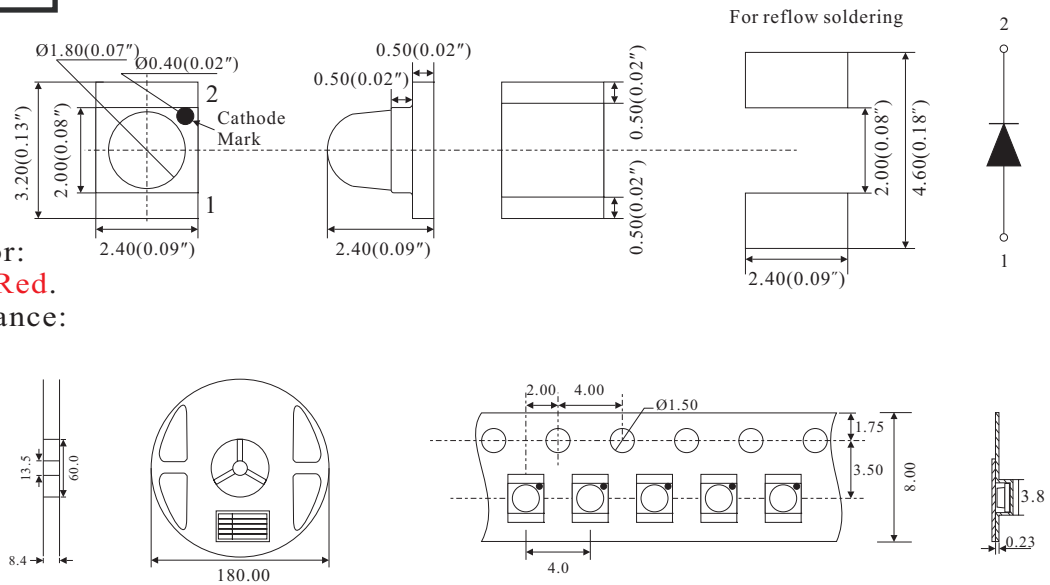
PACKAGE DIMENSION

TY-1309UR1



Features:

1. Emitted Color:
Ultra Bright Red.
2. Lens Appearance:
Water Clear



Absolute Maximum Ratings at $T_A=25^{\circ}\text{C}$

Parameter	Symbol	Maximum Rating	Units
Power Dissipation	Pd	81	mW
Forward Current	I _F	30	mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width.)	I _{FP}	125	mA
Reverse Voltage	V _R	5	V
Operating Temperature	T _{opr}	-20°C to +80°C	
Storage Temperature	T _{stg}	-20°C to +80°C	

Electrical / Optical Characteristics at $T_A=25^{\circ}\text{C}$

Parameter	Symbol	MIN.	TYP.	MAX.	Units	Test Condition
Forward Voltage	V _f	-	2.20	2.70	V	I _F =20mA
Luminous Intensity	I _v	-	1500	-	mcd	I _F =20mA
Reverse Current	I _R	-	-	10	uA	V _R =5V
Peak Wavelength	λ _p	-	635	-	nm	I _F =20mA
Dominant Wavelength	λ _d	619	624	629	nm	I _F =20mA
Spectral Line Half-width	Δλ	-	20	-	nm	I _F =20mA
Viewing Angle	2θ _{1/2}	-	15	-	deg	I _F =20mA

1. All dimension are in millimeters (inches);
2. Tolerance is ±0.10mm (0.004") unless otherwise specified;
3. Luminous intensity tolerance is ±10%;
4. 1,500pcs in a reel.