



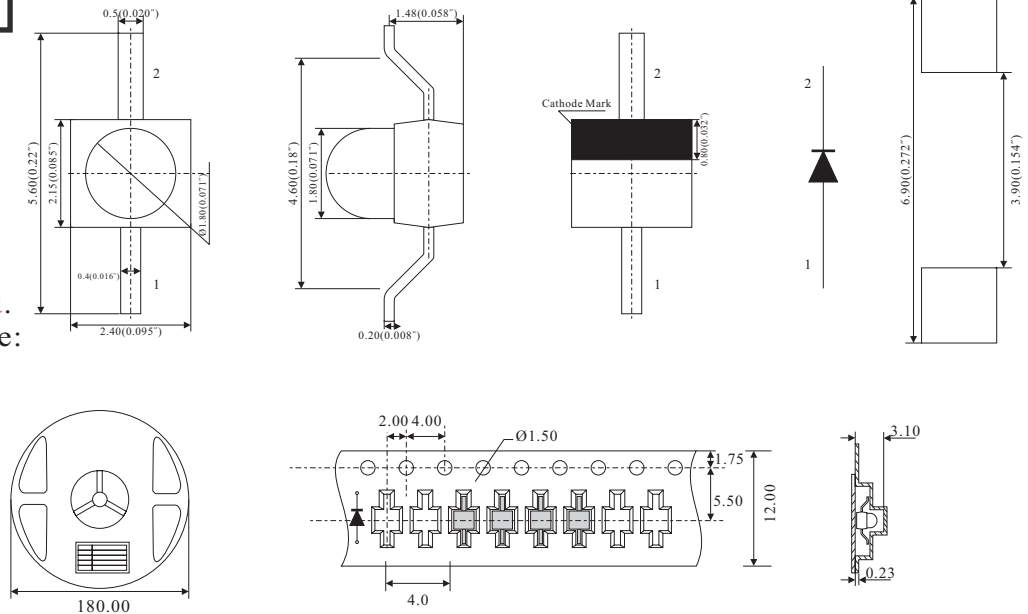
## PACKAGE DIMENSION

### TY-2209UR1



**Features:**

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



### Absolute Maximum Ratings at T<sub>A</sub>=25°C

Parameter	Symbol	Maximum Rating	Units
Power Dissipation	P <sub>d</sub>	75	mW
Forward Current	I <sub>F</sub>	30	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width.)	I <sub>FP</sub>	125	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	T <sub>opr</sub>	-20°C to +80°C	
Storage Temperature	T <sub>stg</sub>	-20°C to +80°C	

### Electrical / Optical Characteristics at T<sub>A</sub>=25°C

Parameter	Symbol	MIN.	TYP.	MAX.	Units	Test Condition
Forward Voltage	V <sub>f</sub>	-	2.00	2.50	V	I <sub>F</sub> =20mA
Luminous Intensity	I <sub>v</sub>	-	550	-	mcd	I <sub>F</sub> =20mA
Reverse Current	I <sub>R</sub>	-	-	10	uA	V <sub>R</sub> =5V
Peak Wavelength	λ <sub>p</sub>	635	640	645	nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>	-	630	-	nm	I <sub>F</sub> =20mA
Spectral Line Half-width	Δλ	-	21	-	nm	I <sub>F</sub> =20mA
Viewing Angle	2θ <sub>1/2</sub>	-	20	-	deg	I <sub>F</sub> =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. Lead Soldering Temperature: 260°C for 5 Sec. (5mm from body);
5. 1,000pcs per reel.