

1. Name: UV LED

2. Model: UV-375-540

3. Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Item	Symbol	Maximum rating	Unit
DC Forward current	I_F	25	mA
Pulse forward current*	I_{FP}	100	mA
Power dissipation	P_D	100	mW
Operating temperature	T_{OPR}	-30 to +80	$^\circ\text{C}$
Storage temperature	T_{STG}	-30 to +85	$^\circ\text{C}$
Soldering temperature	T_{SOL}	260 $^\circ\text{C}$ within 10 seconds	

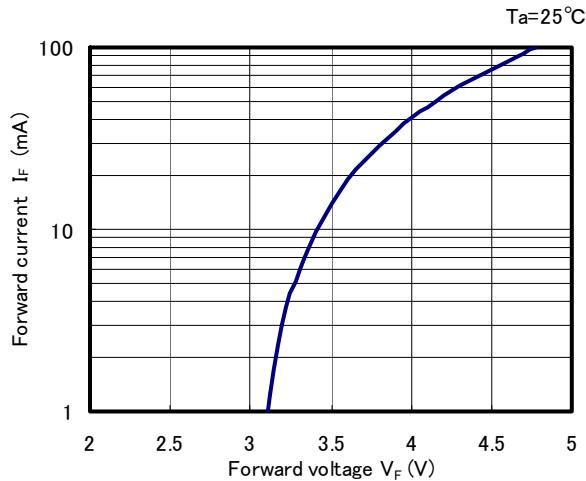
* Conditions: Duty cycle $\leq 1/10$, Pulse width $\leq 0.1\text{msec}$

4. Optical and electrical characteristics ($T_a=25^\circ\text{C}$)

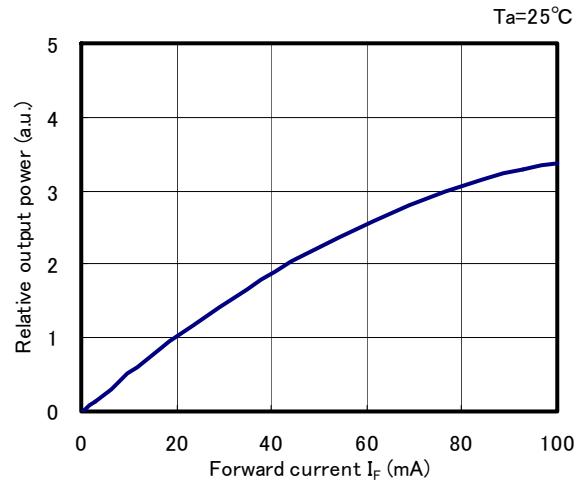
Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F=20\text{mA}$	3.2	3.6	4.2	V
Peak wavelength	λ_p	$I_F=20\text{mA}$	375	-	380	nm
Full width at half maximum	$\Delta\lambda$	$I_F=20\text{mA}$	10	15	20	nm
Optical output power	Po	$I_F=20\text{mA}$	17	21	25	mW

Optical and electrical characteristics

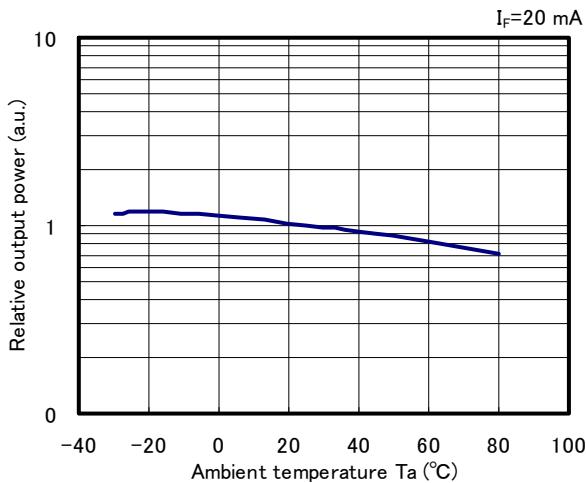
■ Forward current vs. Forward voltage



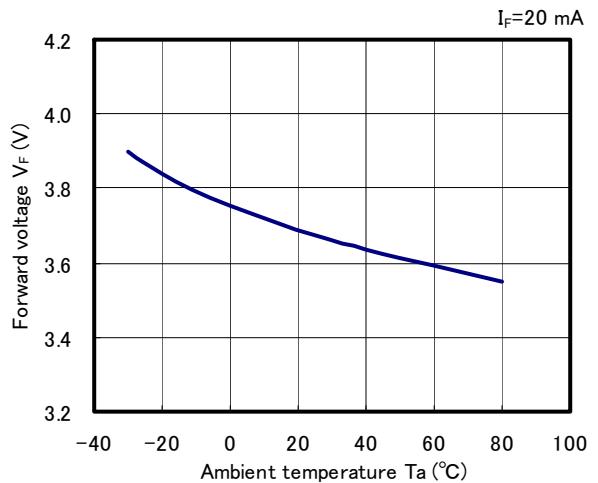
■ Relative output power vs. Forward current



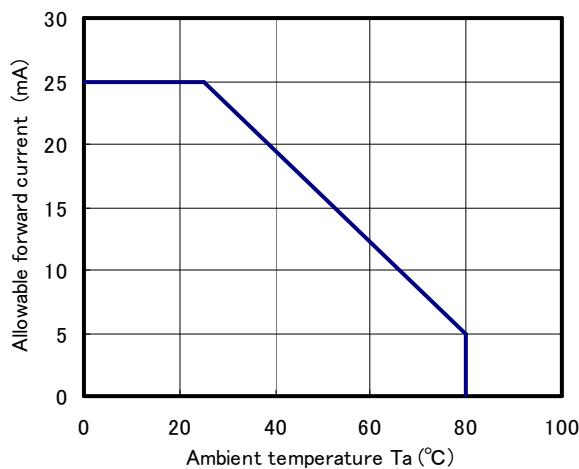
■ Relative output power vs. Ambient temperature



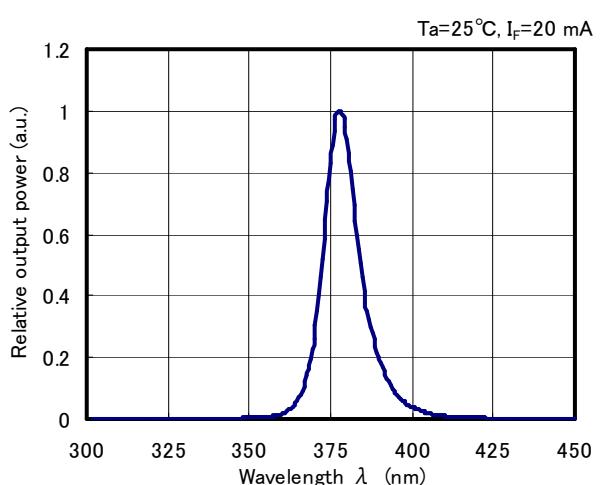
■ Forward voltage vs. Ambient temperature



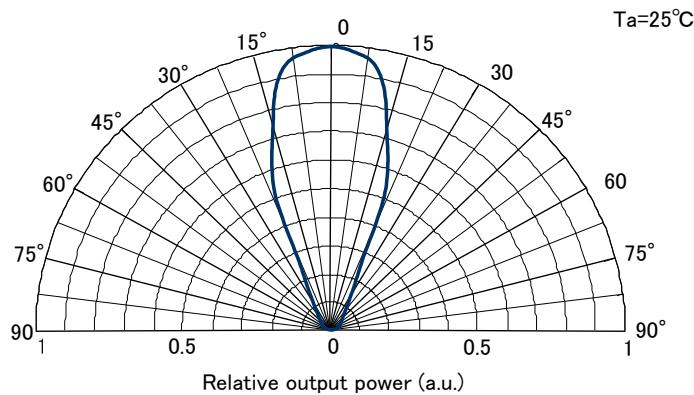
■ Allowable forward current vs. Ambient temperature



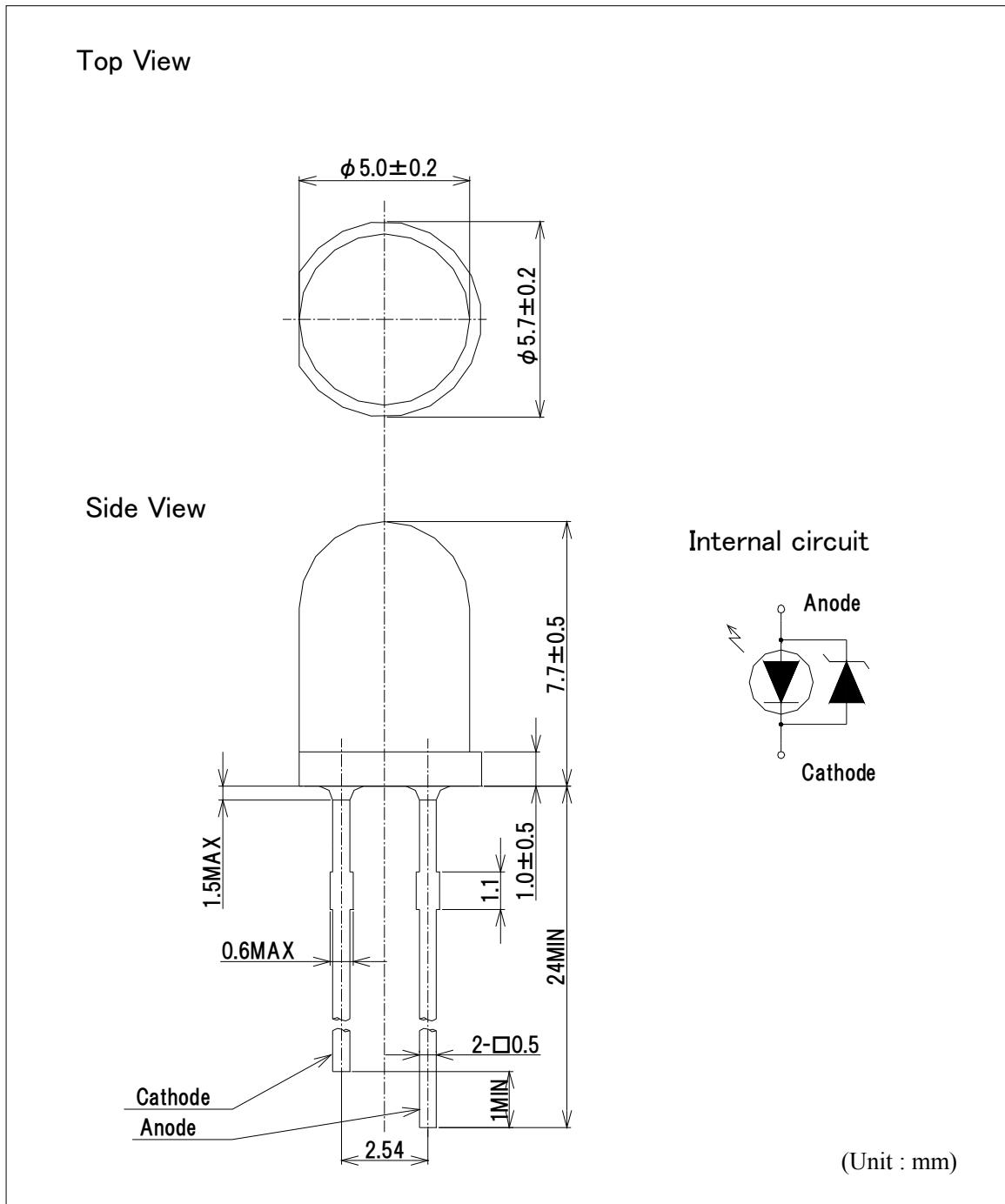
■ Spectrum



■ Radiation pattern



■ Dimensional outline drawing



*A Zener diode is built in the protective circuit against static electricity.

Item	Material
Encapsulating Resin	Silicone resin
Lead Frame	Fe + Ag coating