DATA SHEET

SPEC. NO. : SZ22031001
DATE : 2022/03/10
REV. : A/0

Approved By: Checked By: Prepared By:

Parameter	MAX.	Unit
Power Dissipation	80	mW
Continuous Forward Current	50	mA
Peak Forward Current[*2]	500	mA
Reverse Voltage	5	V
Electrostatic Discharge (HBM)[*3]	4000	V
Moisture Sensitivity Level[*1]	4	
Operating Temperature	-40 to + 85	
Storage Temperature	-40 to + 100	
IR Reflow Temperature	260 for 10 Seconds MAX.	

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Radiant Intensity	Ie	12.5	18	---	mW/sr	I_F=20mA (Note 1,3)
		31	45	---	mW/sr	I_F=50mA (Note 1,3)
Viewing Angle(X)	$2\theta_{1/2}$	70	75	80	Deg.	(Note 2)
Viewing Angle(Y)		12	15	18		
Decentration angle(X)	---	---	---	±4	Deg.	---
Decentration angle(Y)	---	---	---	±3	Deg.	---
Peak Wavelength	λp	---	940	---	nm	I_F=50mA
Spectral Line Half- Width	λ	---	50	---	nm	I_F=50mA
Forward Voltage	V_F	---	1.30	1.55	V	I_F=20mA
		---	1.35	1.60	V	I_F=50mA
Reverse Current	I_R	---	---	5	μA	V_R=5V

1. Point sources of the amount of radiation per unit time in a given direction within the unit solid Angle radiated energy.
2. $\theta_{1/2}$ is the off-axis angle at which the Radiant Intensity is half the axial Radiant Intensity.
3. The Ie guarantee should be added ±15% tolerance.

Fig.1 Spectral Dlstrbution

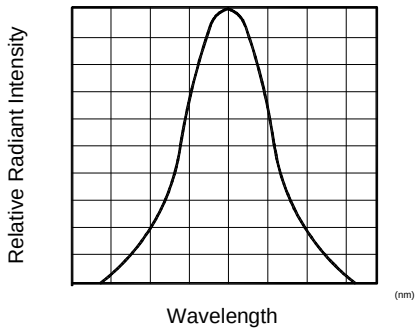


Fig.2 Forward Current Vs Ambient Temperature

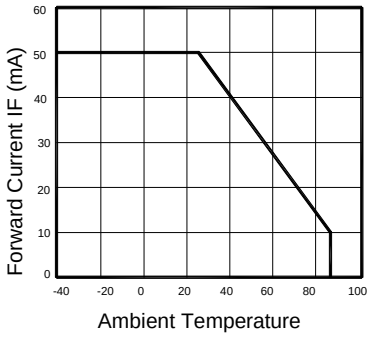


Fig.4 Relative Radiant Intensity Vs Ambient Temperature

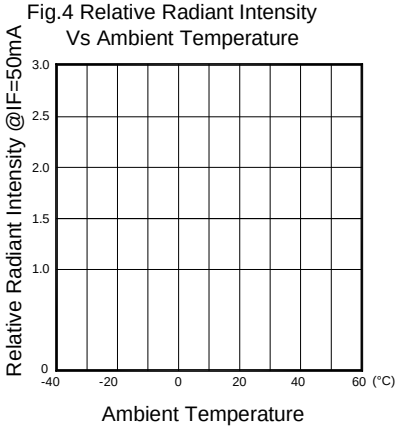
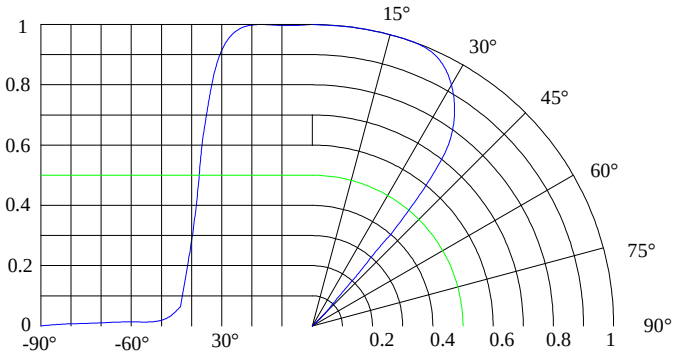
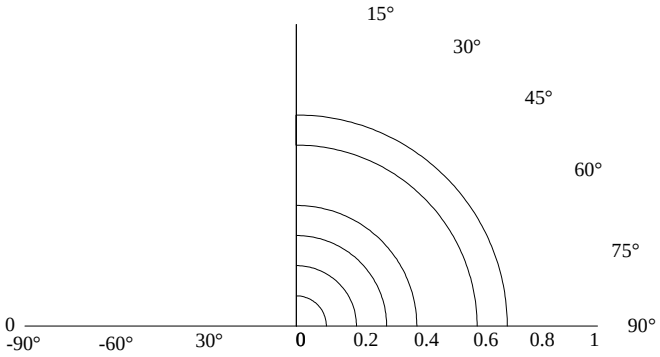
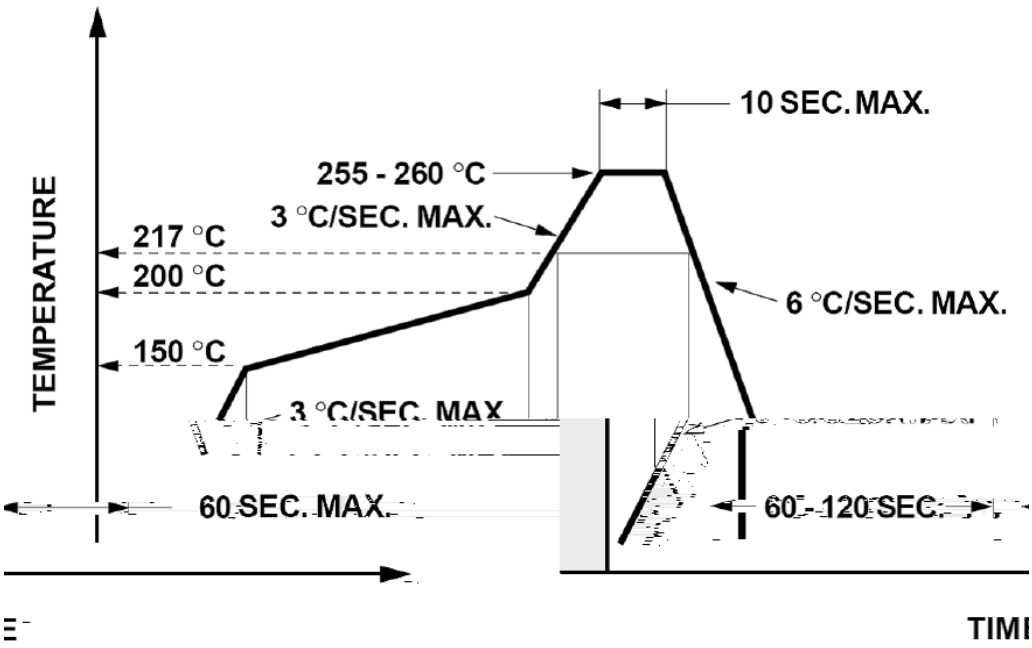


Fig.6 Radiation Diagram







1. Reflow soldering should not be done more than two times.
2. When soldering, do not put stress on the LEDs during heating.

1. When hand soldering, the temperature of the iron must less than 300℃ for 3 seconds.
2. The hand solder should be done only once.

Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of LEDs will or will not be damaged by repairing.