

Snowdragon Industrial Co.,Ltd

DATA SHEET

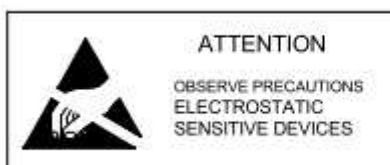
MODEL No : SD546RDR-0K-S1-P

Description:

- 5mm Oval
- Lens Color: Red
- Emitting Color: Red
- With Stopper
- Viewing Angle : 95°

DiceMaterial: InGaN

PREPARED BY	CHECKED BY	APPROVED BY
CUSTOMER APPROVED SIGNATURES		

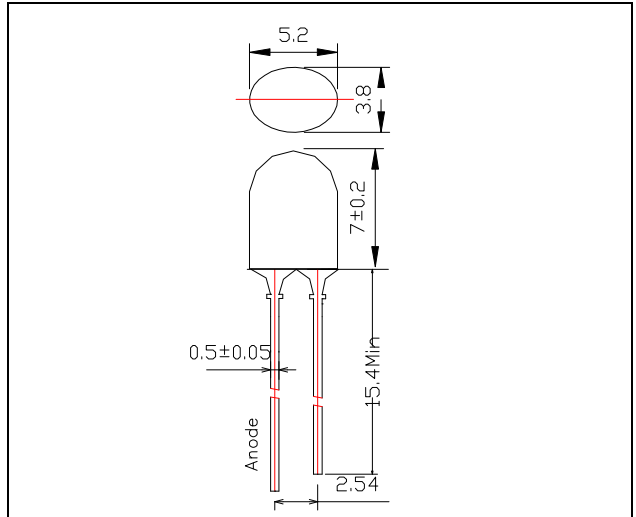


Applications :

Dimension Drawing :

Absolute Maximum Ratings (Ta = 25°C)

Items	Symbol	Absolute maximum Rating	Unit
Forward Current	I_F	25	mA
Peak Forward Current*	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	100	mW
Operation Temperature	T_{opr}	-20 ~ +75	°C
Storage Temperature	T_{stg}	-30 ~ +80	°C
Lead Soldering Temperature	T_{sol}	Max.260°C for 3 sec Max. (3mm from the base of the epoxy bulb)	



Notes:

- 1.All dimensions are in mm, Tolerance is ± 0.25 mm unless others noted
- 2.An epoxy meniscus may extend about 1.5mm
- 3.Burr around bottom of epoxy may be 0.5mm max.

*pulse width ≤ 0.1 msec duty $\leq 1/10$

Typical Electrical (Ta = 25°C)

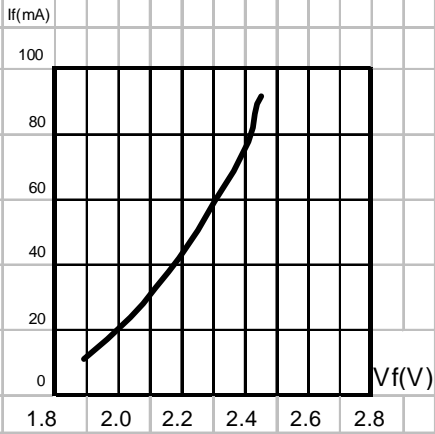
Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 20$ mA	1.7	2.2	2.6	V
Reverse Current	I_R	$V_R = 5$ V	---	---	10	μ A
Wavelength	λ_D	$I_F = 20$ mA	---	625	---	nm
Luminous Intensity	I_V	$I_F = 20$ mA	---	500	---	mcd
50% Power Angle	$2\theta_{\frac{1}{2}H-H}$	$I_F = 20$ mA	---	95	---	deg
	$2\theta_{\frac{1}{2}V-V}$	$I_F = 20$ mA	---	55	---	deg

Rank	Luminous Intensity((mcd)	Rank	Luminous Intensity((mcd)	Rank	Luminous Intensity((mcd)
/	/	/	/	/	/

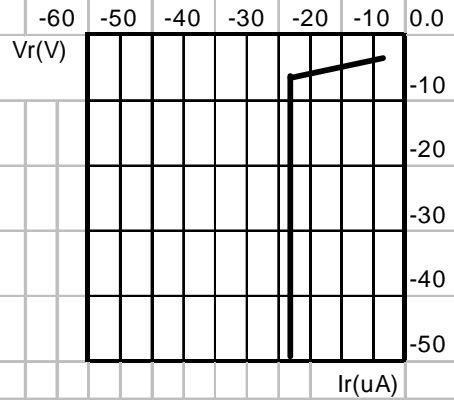
Important Notes :

- 1) All ranks will be included per delivery, rank ratio will be determined by Snowdragon.
- 2) Tolerance of measurement of luminous intensity is $\pm 15\%$.
- 3) Tolerance of measurement of dominant wavelength is ± 1 nm.
- 4) Tolerance of measurement of Vf is ± 0.05 V.
- 5) Packaging methods are available for selection, please refer to PACKAGING STANDARD.
- 6) Please refer to LED LAMP RELIABILITY TEST STANDARD for reliability test conditions.

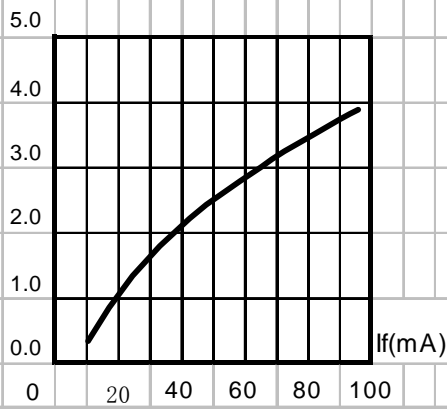
Typical Optical-Electronic Characteristic Curves



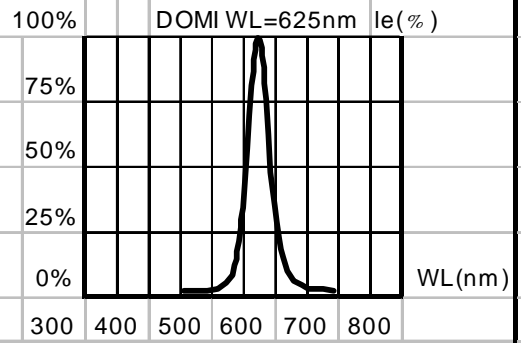
**FORWARD CURRENT V S .
FORWARD VOLTAGE**



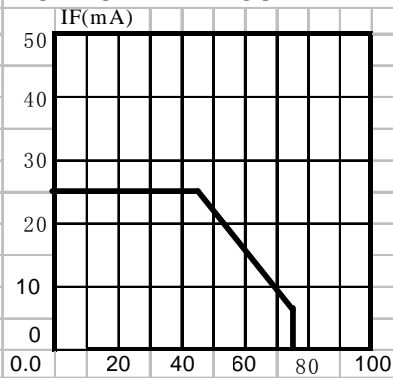
**REVERSE CURRENT V S .
REVERSE VOLTAGE**



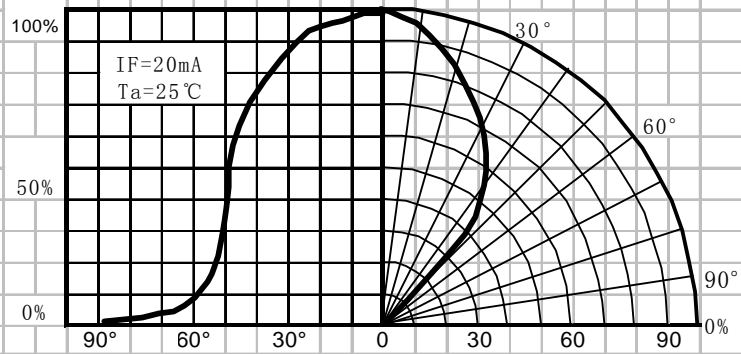
**RELATIVE LUMINOUS INTENSITY
V S . FORWARD CURRENT .**



**RELATIVE LUMINOUS
INTENSITY VS WAVELENGTH**



**MAXIMUM FORWARD CURRENT VS
TEMPERATURE($T_{j\text{max}}=105^\circ\text{C}$)**



FAR FIELD PATTERN