

Snowdragon Industrial Co.,Ltd DATA SHEET

MODEL No: SDL512RCF-01

ENG. No: **09041806**

Description:

5mm Round

Lens Color: Water clear

Emitting Color: Red

■ No Stopper

■ Viewing Angle :15°

DiceMaterial: AlGalnP

PREPARED BY	CHECKED BY	APPROVED BY			
CUSTOMER APPROVED SIGNATURES					





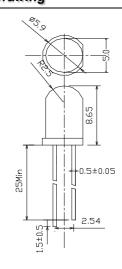
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Applications:

Absolute Maximum Ratings at Ta = 25°C

Items	Symbol	Absolute maximum Rating	Unit
Forward Current	l _F	25	mA
Peak Forward Current*	I _{FP}	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	65	mW
Operation Temperature	T_{opr}	-20 ~ +75	°C
Storage Temperature	T _{sta}	-30 ~ +80	°C
Lead Soldering Temperature	T_{sol}	Max.260°C for 3 sec Max. (3mm from the base of the epoxy bulb)	

Dimension Drawing



Notes:

- 1.All dimensions are in mm, Tolerance is ±0.25mm 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 <= 1/10

Typical Electrical & Optical Characteristics ($Ta = 25^{\circ}C$)

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Items	Symbol	Condition	Min.	Тур.		Max.	Unit
Forward Voltage	V _F	$I_F = 20mA$	1.7	2.2		2.6	V
Reverse Current	I _R	$V_R = 5V$				10	μΑ
Wavelength	λ_{D}	$I_F = 20mA$		625			nm
Luminous Intensity	I _V	$I_F = 20 \text{mA}$		2500)		mcd
50% Power Angle	20½H-H	$I_F = 20mA$		15			deg
	2θ½V-V	$I_F = 20mA$					deg
Rank	Luminous	Rank	Lumino	ous	R	ank	Luminous

Rank	Luminous	Rank	Luminous	Rank	Luminous
	Intensity(mcd)		Intensity(mcd)		Intensity(mcd)
1	1	1	1	1	1

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 ±15%.
- 3) Tolerance of measurement of dominant wavelength is ±1nm.
- 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.

ENG. No: 09041806 Typical Optical-Electronic Characteristic Curves If(mA) -20 -10 0.0 -60 -50 -40 -30 100 Vr(V) -10 80 -20 60 -30 40 -40 20 2.2 2.4 2.6 Ir(uA) 1.7 Fig. 2 REVERSE CURRENT Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE. VS. REVERSE VOLTAGE. 5.0 4.0 100% DOMI WL=625nm le(%) 75% 3.0 50% 2.0 25% 1.0 If(mA) 0.0 0% WL(nm) 0 40 60 80 100 300 400 500 600 700 800 Fig.4 RELATIVE LUMINOUS Fig.3 RELATIVE LUMINOUS IN INTENSITY VS.WAVELENGTH. TENSITY VS. FORWARD CURRENT. IF(mA) 50 100% IF=20mA40 60° 30 50% 20 10 90 0.0 60 ٧S AMBIENT TEMPERATURE(Tjmax=105℃) Fig.6 FAR FIELD PATTERN

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