



Snowdragon Industrial Co.,Ltd

DATA SHEET

MODEL No : SD358BWY-0-SH-D

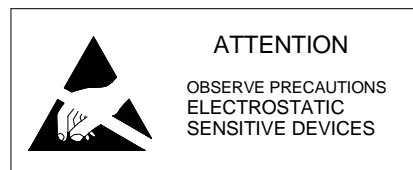
ENG. No:

Description:

- 358 Rectangular lamp
- Lens Color: Diffused
- Emitting Color: Blue
- Viewing Angle :120°
- No Stopper

Dice Material: AlGaInP

PREPARED BY	CHECKED BY	APPROVED BY
CUSTOMER APPROVED SIGNATURES		



Applications:

Dimension Drawing

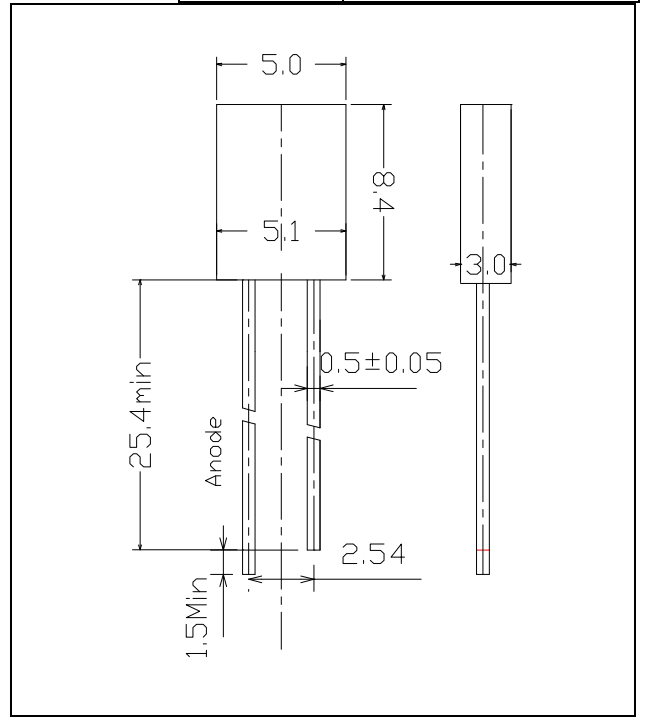
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Model No.	SD358BWY-0-SH-D
Revision:	

Absolute Maximum Ratings at 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)	

*pulse width <=0.1msec duty <=1/10



Typical Electrical & Optical Characteristics (Ta = 25°C)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	I _F = 20mA	---	2.8v	3.2v	3.6v	I _F = 20mA
Reverse Current	V _R = 5V	---	---	---	10μA	V _R = 5V
Wavelength	I _F = 20mA	---	---	470nm	---	I _F = 20mA
Luminous Intensity	I _F = 20mA	--	---	130mcd	---	I _F = 20mA
50% Power Angle	I _F = 20mA	---	---	120 deg	---	I _F = 20mA
	I _F = 20mA	---	---	---	---	I _F = 20mA

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 ±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.

Typical Optical-Electronic Characteristic Curves

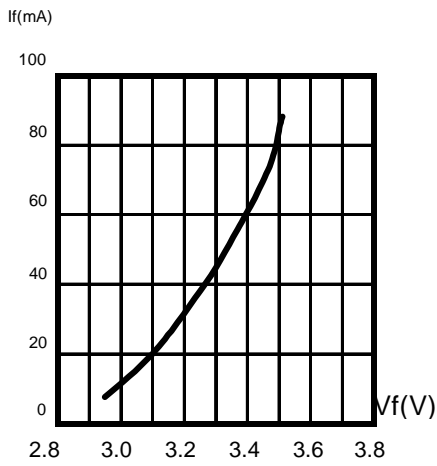


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

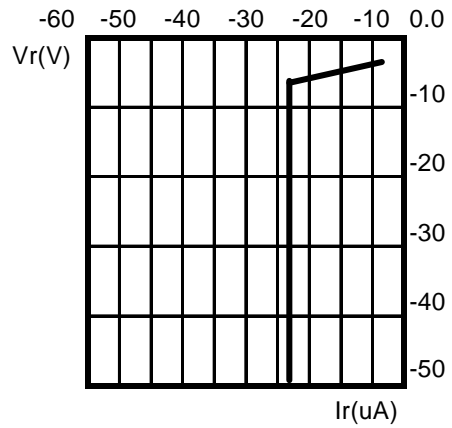


Fig.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

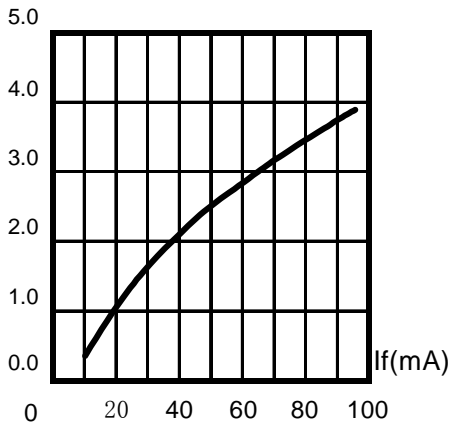


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

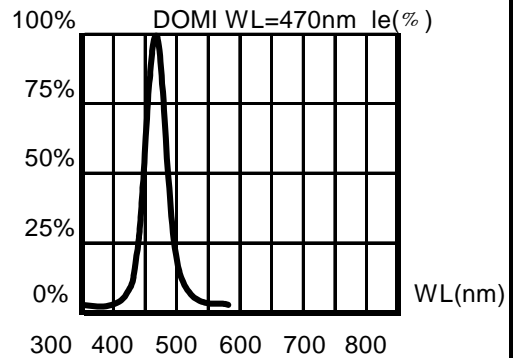
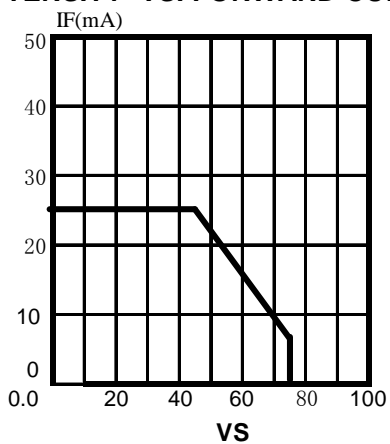


Fig.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.



AMBIENT TEMPERATURE(Tjmax=105°C)

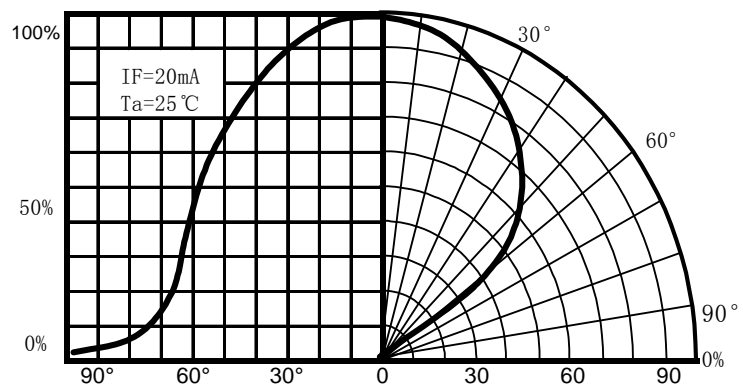


Fig.6 FAR FIELD PATTERN

LED Lamp Reliability test standard

Type	Test Item	REF. Standard	Test conditions		Note	Number of Damaged
			Binary / Trinary Chip	Quaternary Chip		
Environments Sequence	Temperature Cycle	JIS C7021 (1977)A4	-20°C ~25°C ~80°C ~25°C 30min,5min,30min,5min	-40°C ~25°C ~100°C ~25°C 30min,5min,30min,5min	100 cycles	0/100
	Thermal shock	MIL-STD-202G	-20°C ~80°C 30min, 30min	-40°C ~100°C 30min, 30min	100 cycles	0/100
	High Temperature Storage(*)	JIS C7021 (1977)B10	Ta=80°C	Ta=100°C	1000Hrs	0/100
	Low Temperature Storage	JIS C7021 (1977)B12	Ta=-30°C	Ta=-40°C	1000Hrs	0/100
Operation Sequence	Life test	JIS C7035 (1985)	Ta=25°C If=25mA	Ta=25°C If=25mA	1000Hrs	0/100
	High humidity Heat life test	-----	60°C RH=90% If=20mA	60°C RH=90% If=20mA	500Hrs	0/100
	Low temperature Life test	-----	Ta=-20°C If=20mA	Ta=-30°C If=20mA	1000Hrs	0/100
Destructive Sequence	Resistance to solderingHeat	JIS C7021 (1977)A11	Tsol=260±5°C ,10sec. (3mm from the base of the epoxy bulb)		1 time	0/20
	Solder ability	JIS C7021 (1977)A2	Tsol=235±5°C ,5sec. (using flux)		1 time (over95%)	0/20
	Lead Pull/Bend Test	JIS C7021 (1977)A11	Load 2.5N(0.25kgf) 0°C ~90°C ~0°C ;Bend 3times		3 time	0/10
ESD Test	ESD TEST	AEC (Q101002)	Human body model 1000v		-----	0/10

Items marked with * are selective.

Failure Criteria

Item	Symbol	Test Condition	Criteria for Judgment	
			min	Max
Forward Voltage	VF	IF = 20 mA	-----	Initial Data x 1.1
Reverse Current	IR	VR = 5 V	-----	100 A
Luminous Flux/Intensity	/IV	IF = 20 mA	Initial Data x 0.7 (Total degradation) Initial Data x 0.5 (Single lamp degradation)	