



Snowdragon Industrial Co.,Ltd

DATA SHEET

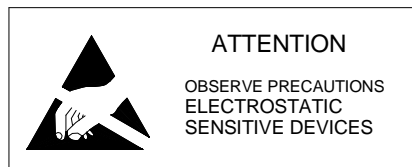
MODEL No : SD-FJ3F4-H

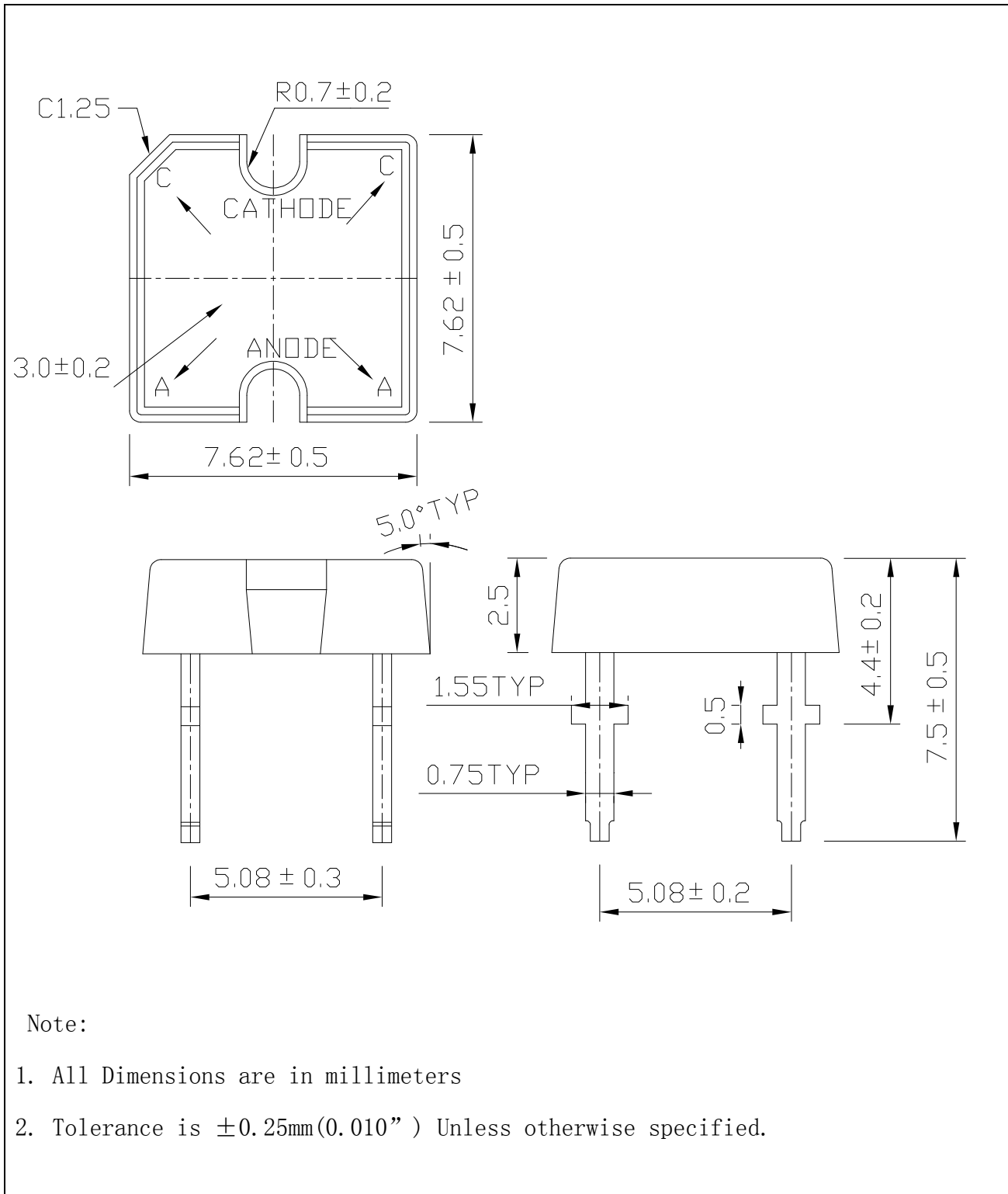
ENG. No:

Description:

- Flat High Flux led
- Lens Color: Water Clear
- Emitting Color: Orange
- Viewing Angle :120°
- With Stopper

PREPARED BY	CHECKED BY	APPROVED BY
CUSTOMER APPROVED SIGNATURES		



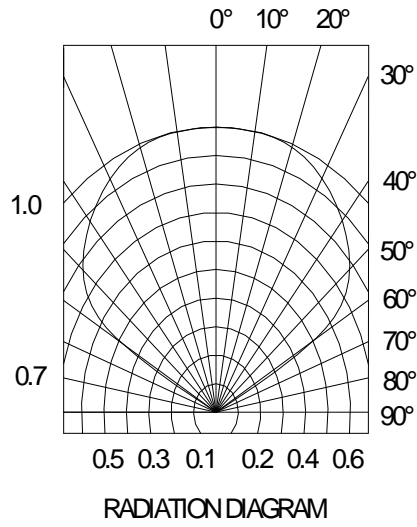
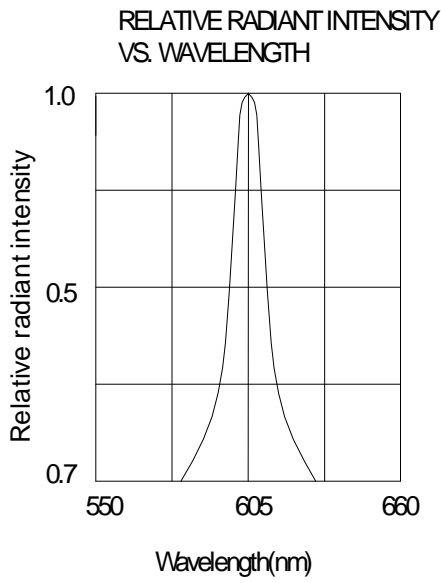
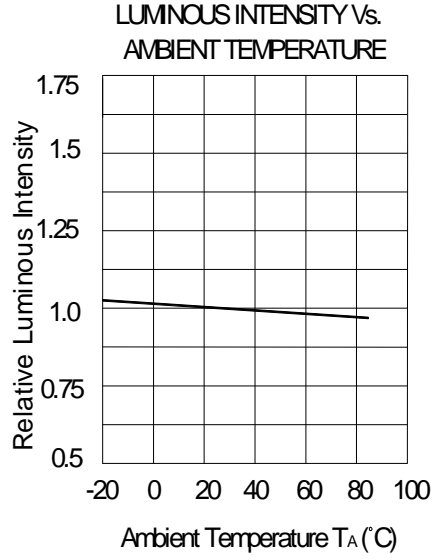
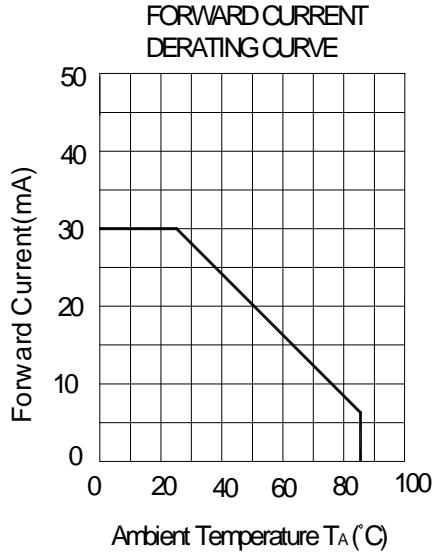


Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Max	Unit
Power Dissipation	P _D	100	mW
Continuous Forward Current	I _F	30	mA
Derating Linear From 50°C	V _R	0.4	mA /°C
Reverse Voltage	V _R	5	V
Operating Temperature Range	Topr	-40°C to+80°C	
Storage Temperature Range	Tstg	-25°C to+100°C	
Lead Soldering Temperature 【4mm From Body】	Tsol	260°C For 5 Seconds	

Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Condition
Forward Voltage	V _F	1.9	---	2.5	V	I _f =20mA
Luminous Intensity	I _v	150	250	---	mcd	I _f =20mA
Dominant Wavelength	λ _d	600	605	610	nm	I _f =20mA
Spectral Line Half-Width	Δλ	---	30	---	nm	I _f =20 mA
Reverse Current	I _R	---	---	10	mA	V _R =5V
Viewing Angle	2θ ^{1/2}	---	120	---	deg	I _f =20mA



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)	
