



Notes:

- 1.All dimension units are millimeters.
- 2.All dimension tolerance is ± 0.2 mm unless otherwise noted.
- 3.An epoxy meniscus may extend about 1.5mm down the leads.
- 4.Burr around bottom of epoxy may be 0.5mm max.

Features:	■ Descriptions:	■ Applications:
• The service life is	• The series is specially	Backlight
long	designed for application	■ Monitor
•The credibility is	requiring higher brightness.	■ Illuminate
strong		

Environmental

protection, economy

energy

Ch	Lens Color	
Material	Emitting Color	
InGaN	Yellow	Water clear

■Absolute Maximum Ratings at Ta=25 °C

Parameter	Symbol	Rating	Unit
Forward Current	IF	20	mA
Operating Temperature	Topr	-25 to +80	$^{\circ}$
Storage Temperature	Tstg	25 to +80	$^{\circ}$
Soldering Temperature	Tsol	260	$^{\circ}$
Power Dissipation	Pd	50	mW
Peak Forward Current (Duty1/10@1kHz)	IF(Peak)	100	mA
Reverse Voltage	VR	5	V
Electrostatic DischargeThreshold (HBM)	ESD	3000	V

■Electronic Optical Characteristics

Parameter	Symbol	Min.	Тур.	Max.	Unit	Condition
Luminous Intensity	IV	8000		10000	mcd	I _F =20mA
Viewing Angle	201/2	/	60	/	deg	I _F =20mA
Peak Wavelength	λр	/		/	nm	I _F =20mA
Dominant Wavelength	λd	588		595	nm	I _F =20mA
Forward Voltage	Vf	1.9	2.0	2.2	V	I _F =20mA
Reverse Current	IR	/	/	5	μΑ	V _R =5V

Suggestions to customers:

1. Soldering Bath at 260 $^{\circ}$ C \pm 5 $^{\circ}$ C with in 3 seconds.(Dip depth should under

6mm below seating plane.)

2. The neutrality flux must be used before soldering.

CLEANING:

Do not use unspecified chemical liquid to clean LED. They could harm it IF cleaning

is necessary, wipe the pin out with alcohol. Freon TE or Chlorosen at normal temperature

for less than 1 minute or wipe the surface with alcohol.

METHODS AGAINST STATIC ELECTRICITY:

Static electricity is the enemy of lamps emitting blue and green. Workers must put on

working rings, gloves clothes that protect static electricity while working. Wires of the

rings keep well together with the floor and there must be wires to connect the irons and the

floor.

PREVENTING OVERCURRENT:

1. Be not overcurrent.

2. In order to cooperate LEDs under stable conditions, put protective resisetor in

seride. Resistor values can be determined by supplying voltage or current for the

LEDs Recommended current is in the range of forward current 5mA-20mA.

3. Circuit must be designed so that overvoltage is not applied the LED during

on/off switching. Transient or pulse current will damage junction of LED die.

■Reliability Performance

(1) TEST ITEMS AND RESULTS

Туре	Test Item	REF Standard	Test Conditions	Note	Number of Damaged
Environmental Sequence	Resistance to Soldering Heat (Reflow Soldering)		Tsld=230°C,10sec	2times	0/22
	Temperature cycle	JIS C 7021 (1977)A-4	-20°C 30min 5min 80°C 30min	100 cycle	0/100
	Thermal Shock	MIL-STD- 107D	-20°C 15min 80°C 15min	100cycle	0/100
	High Temperature Storage	JIS C 7021 (1977)B-10	Ta=80°C	1000hrs	0/100
	Temperature Humidity Storage	JIS C 7021 (1977)B-11	Ta=60°C RH=90%	1000hrs	0/100
	Low Temperature Storage	JIS C 7021 (1977)B-12	Ta=-30°C	1000hrs	0/100
Operation Sequence	Life Test	JIS C 7035 (1985)	Ta=25℃ IF=20mA	1000hrs	0/100
	High Humidity Heat Life Test		60°C RH=90% IF=20mA Ta=-20°C	500hrs 1000hrs	0/100
	Low Temperature Life Test		IF=20mA		

(2). Criteria for Judging The Damage:

Item	Symbol	Test Conditions	Criteria for Judgment	
			Min	Max
Forward Voltage	VF	IF=20mA		U.S.K*1.2
Reverse current	IR	VR=5V		U.S.L*2.2
Luminous Intensity	IV	IF=20mA	L.S.L**x0.7	

U.S.L*:Upper Standard Level

L.S.L**:Lower Dtandard Level

Optical characteristics curves









