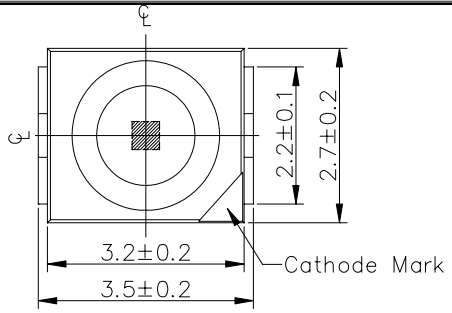
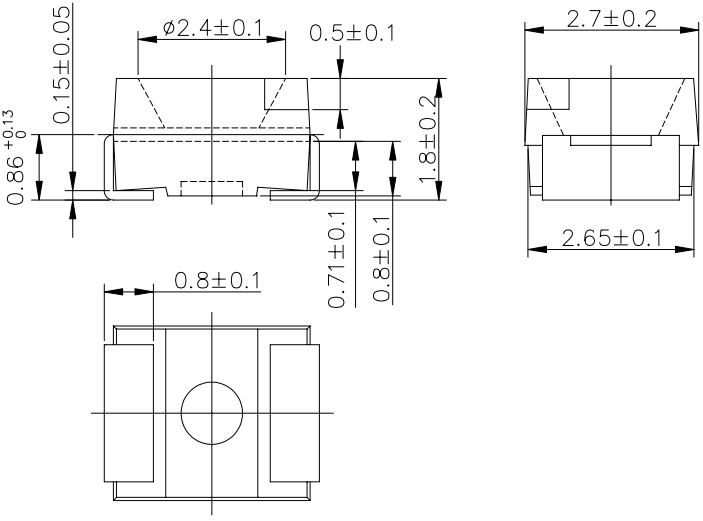
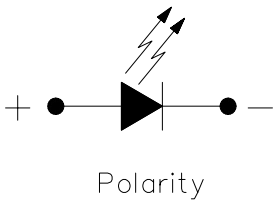
Part Number: 67-21UWC

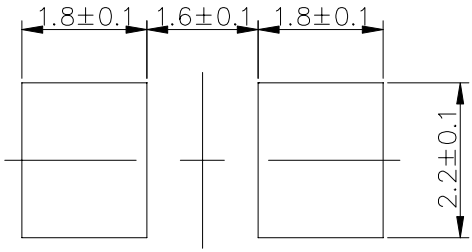
Package outlines & Re-flow Profile



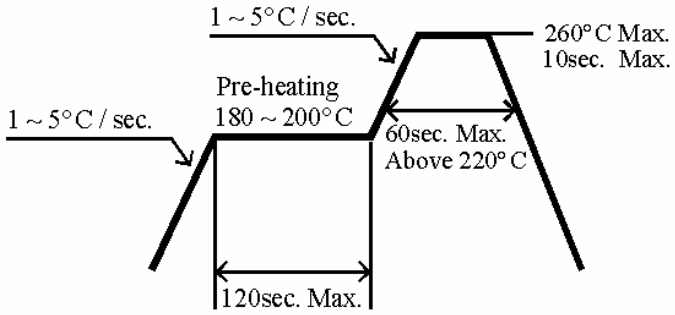




For reflow soldering (Propose)



■Reflow Temp/Time



■Soldering iron

Basic spec is ≤ 5sec when 260℃. If temperature is higher, time should be shorter (+10℃ → -1sec).Power dissipation of iron should be smaller than 15W, and temperatures should be controllable .Surface temperature of the device should be under 230℃ .

ITEM	MATERIALS
Resin (mold)	Epoxy
Lens color	Yellow Diffused
Printed circuit board	BT
Material	InGaN
Emitted color	White

NOTES:

1. All dimensions are in millimeters (inches);
2. Tolerances are ±0.1mm (0.004inch) unless otherwise noted.
3. Polarity referring onto the cathode mark is reversed on the red.

Part Number: 67-21UWC

ELECTRO-OPTICAL CHARACTERISTICS (SDR) (T_A=25℃)

Parameter	Test Condition	Symbol	Value			Unit
			MIN.	TYP.	MAX.	
Viewing angle at 50% I_V	I_F=10mA	2 θ 1/2		120		Deg
Forward voltage	I_F=20mA	V_F	---	3.2	3.5	V
Luminous intensity	I_F=20mA	I_V	900	1200	---	mcd
Chromaticity	I_F=20mA	X	---	0.31	---	---
		Y	---	0.32	---	
Peak pulsing current (1/10 duty f=1kHz)		I_{FP}		100		mA

Absolute maximum ratings (SDR) (T_A=25℃)

Parameter	Symbol	Value	Unit
Forward current	I_F	25	mA
Reverse voltage	V_R	5	V
Reverse current	I_R	50	μA
Electrostatic Discharge	ESD	150	V
Power Dissipation	P_D	110	mW
Operating temperature range	Top	-40 ~+85	℃
Storage temperature range	Tstg	-40 ~+100	℃

Part Number: 67-21UWC

Test items and results of reliability

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP：260±5℃	6 min.	22 PCS	0/1
2	Temperature Cycle	H：+100℃ 30min ∫ 5min L：-40℃ 30min	300 CYCLES	22 PCS	0/1
3	Thermal Shock	H：+100℃ 5min ∫ 10set L：-10℃ 5min	300 CYCLES	22 PCS	0/1
4	High Temperature Storage	TEMP：100℃	1000 HRS	22 PCS	0/1
5	Low Temperature Storage	TEMP：-40℃	1000 HRS	22 PCS	0/1
6	DC Operating Life	I_F=20mA	1000 HRS	22 PCS	0/1
7	High Temperature / High Humidity	85℃ / 85%RH	1000 HRS	22 PCS	0/1

Part Number: 67-21UWC

Color Ranks

Color Ranks

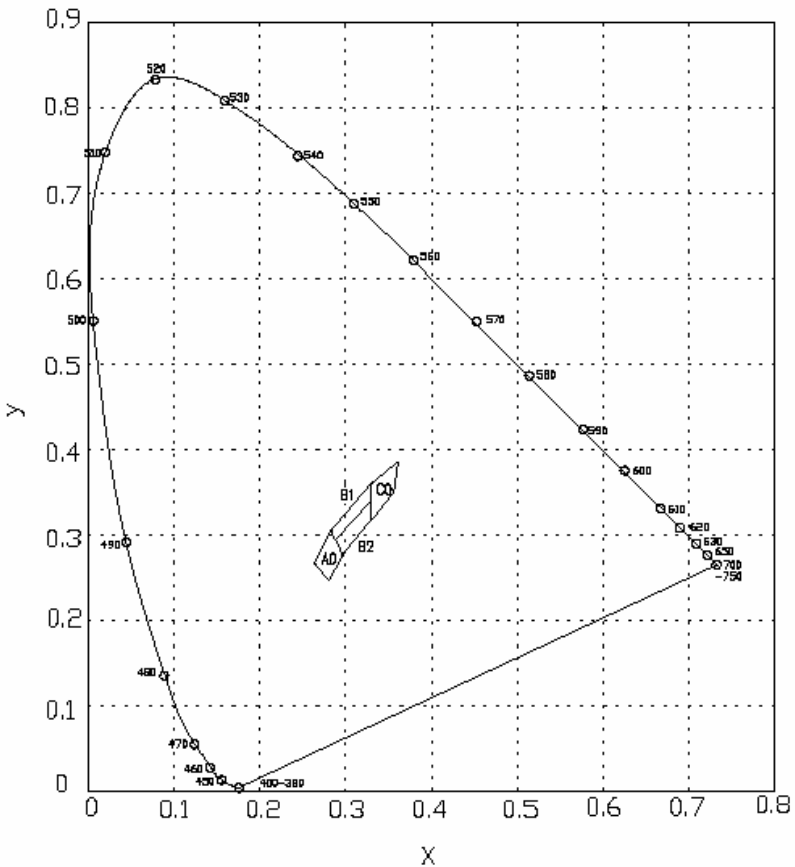
	Rank A0			
x	0.280	0.264	0.283	0.296
y	0.248	0.267	0.305	0.276

	Rank B1			
x	0.287	0.283	0.330	0.330
y	0.295	0.305	0.360	0.339

	Rank B2			
x	0.296	0.287	0.330	0.330
y	0.276	0.295	0.339	0.318

	Rank C0			
x	0.330	0.330	0.361	0.356
y	0.318	0.360	0.385	0.351

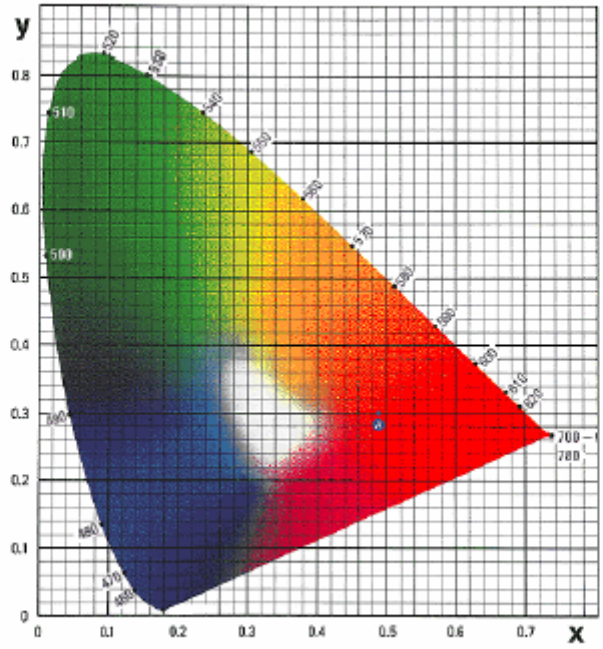
CIE Chromaticity Diagram

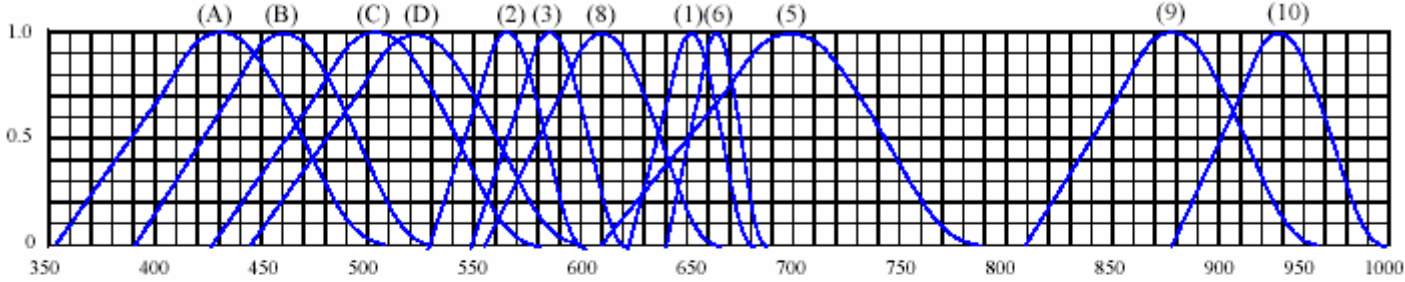


Part Number: 67-21UWC

Typical Electro-Optical Characteristics

◆ **TYPICAL ELECTRICAL-OPTICAL CHARACTERISTICS CURVES**





RELATIVE INTENSITY VS. WAVELENGTH(λp)

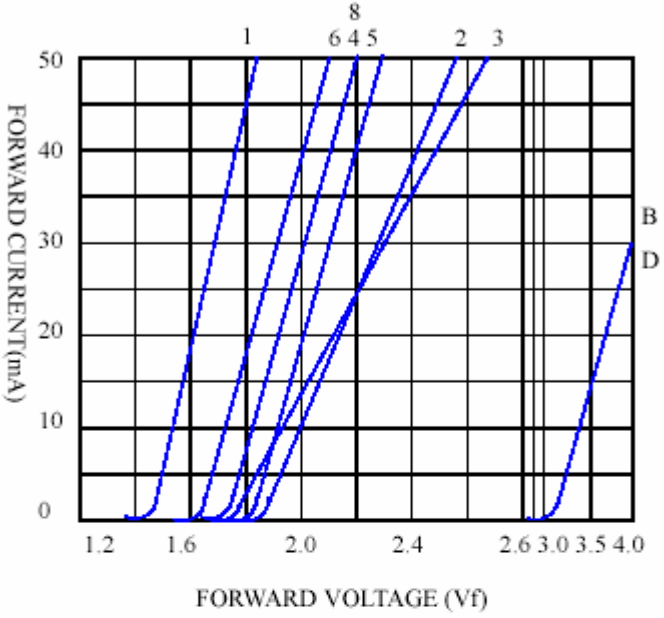
(1) GaAsP/GaAs 655nm/Red
(2) GaP 568nm/ Yellow Green
(3) GaAsP/GaP 585nm/Yellow
(4) GaAsP/GaP 635nm/Orange & Hi-Eff Red
(5) GaP 700nm/Bright Red
(6) GaAlAs/GaAs 660nm/Super Red
(8) GaAsP/GaP 610nm/Super Red
(9)- GaAlAs 880nm
(10)-GaAs/GaAs&GaAlAs/GaAs 940nm
(A)- GaN 430nm/Blue
(B)- InGaN 470nm/Blue
(C)- InGaN 502nm/Ultra Green
(D)- InGaN 523nm/Ultra Green

Part Number: 67-21UWC

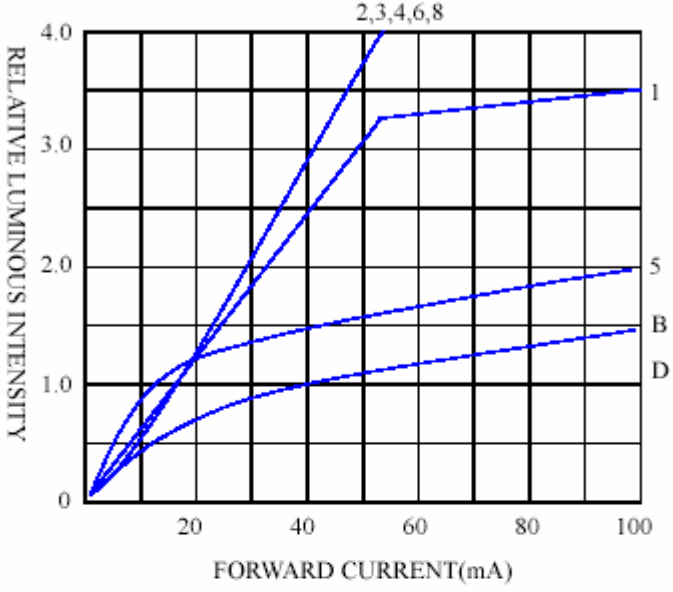
Typical Electro-Optical Characteristics

◆ **CHARACTERISTICS DIAGRAMS**

FORWARD CURRENT VS. FORWARD VOLTAGE



RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



FORWARD CURRENT VS. AMBIENT TEMPERATURE

