Blue LED Chip

SL-NBIT0320-[V#W#I#]

- MOVPE epi-wafer of InGaN alloy films
- Normal type chip (non-flip-chip)
- ※ All samples are 100% tested and sorted, and user can consult about special specifications.

▣ ABSOLUTE MAXIMUM RATINGS (Ta = 25 ℃)

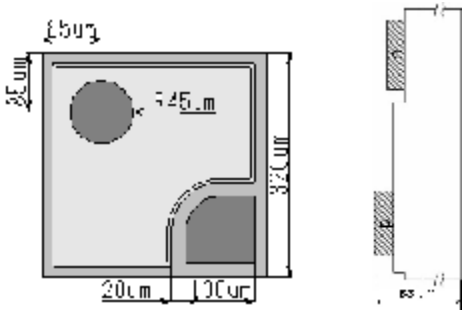
Item	Symbol	Maximum Rating	Unit
DC Forward Current	I_F	30	mA
Pulse Forward Current	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Operating Temperature	T_{opr}	-30 to +85	℃
Storage Temperature	T_{stg}	-40 to +100	℃
ESD sensitivity (HBM) *	V_{ESDS}	2000	V

*ESD testing result is based on statistic measurements. Seller does not give assurance for every chip.

▣ OPTICAL AND ELECTRICAL CHARACTERISTICS (Ta = 25 ℃)

Item	Symbol	Condition		Min	Typ	Max	Unit
Forward Voltage	V_F	I_F=20mA	V_1	2.8	2.9	3.0	V
			V_2	3.0	3.1	3.2	
			V_3	3.2	3.3	3.4	
Reverse Current	I_R	V_R=5V		-	-	1	μA
Wavelength	λ_D	I_F=20mA	W_1	465	-	467.5	nm
			W_2	467.5	-	470	
			W_3	470	-	472.5	
			W_4	472.5	-	475	
Luminous Intensity	I_V	I_F=20mA	I_1	80	-	90	mcd
			I_2	90	-	100	
			I_3	100	-	110	
			I_4	110	-	120	
			I_5	120	-	130	
			I_6	130	-	140	
			...	...	...	...	
			I_{14}	210	-	220	

▣ CHIP DESCRIPTION



▣ MECHANICAL SPECIFICATION

Description	Dimension
Emission Area	260㎛ x 260㎛
Bottom Area	320㎛ x 320㎛ (±10㎛)
Chip Thickness	83㎛ (±5㎛)
N-pad	Φ=100㎛
P-pad	Φ=90㎛
Electrodes Spacing	20㎛
Electrode material	AL