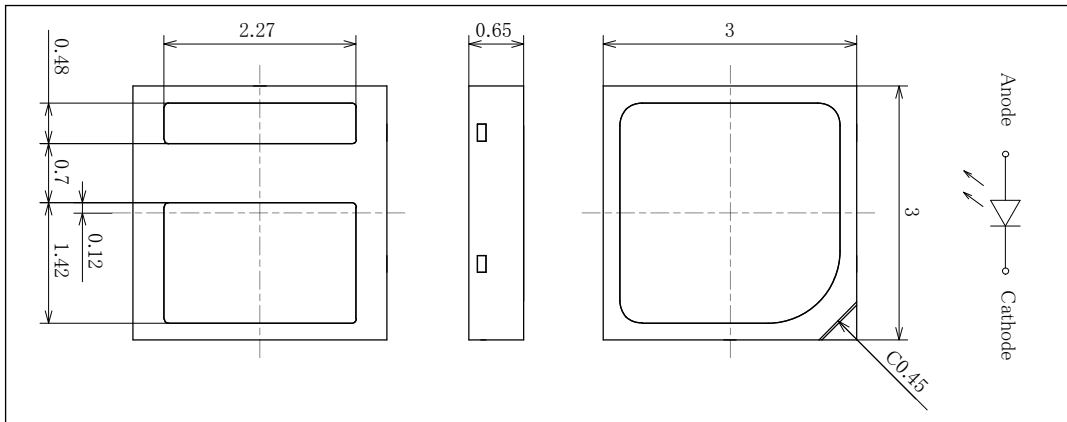


**TN3030D17(6500K)**  
White Hi LED

Outer Dimension (Unit:mm)



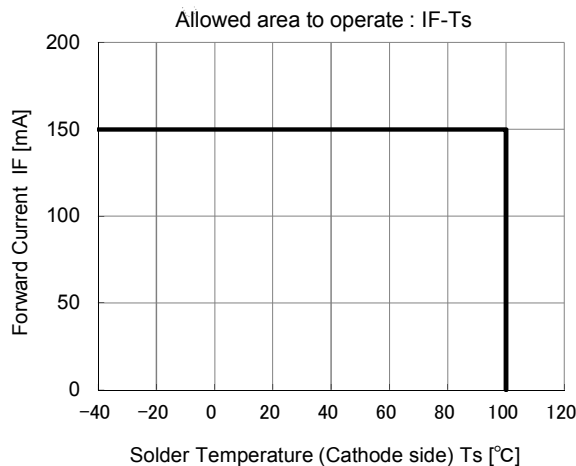
Item	Material
Package	Heat-Resistant Polymer
Encapsulation Resin	Silicone Resin + Phosphor
Lead Frame	Cu Alloy + Ag Plating

- The size of the product doesn't contain burr, etc.
- General Tolerance:  $\pm 0.2\text{mm}$

Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	540	mW
DC Forward Current*	IF	150	mA
Pulse Forward Current**	IFP	250	mA
Reverse Voltage	VR	5	V
Operating Temperature	TOPR	-40 ~ +100	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Dice Temperature	TJ	120	°C

\* Use under these conditions (IF-Ta Characteristic) below

\*\* Duty 1% and Pulse Width=10msec.



Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=65mA	2.7	2.9	3.2	V
Reverse Current	IR	VR=5V			5	uA
Luminous Flux	ΦV	IF=65mA	30.8	33.3	36.8	lm
Chromaticity	Cx	IF=65mA		0.3123		-
	Cy			0.3282		
CRI	Ra	IF=65mA	80			-
Heat Resistance	Rj-s	-		12		°C/W

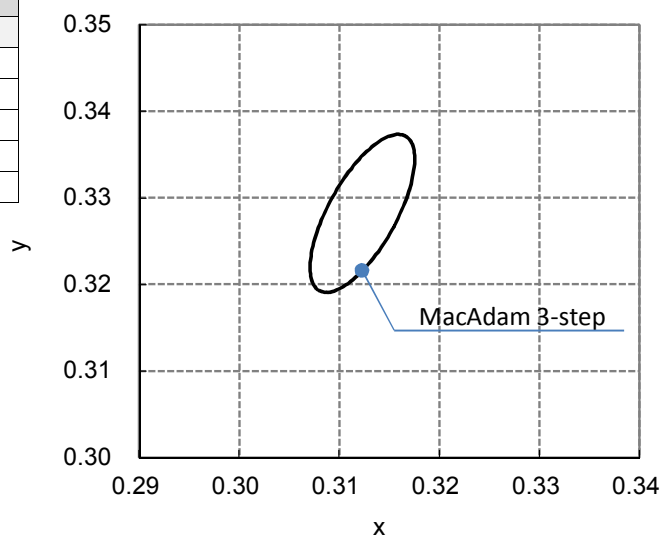
Following Forward Voltage Ranking is applied. (IF=65mA, Ta=25°C)	
Rank	VF (V)
1	2.7 ~ 2.8
2	2.8 ~ 2.9
3	2.9 ~ 3.0
4	3.0 ~ 3.1

- Forward Voltage Measurement Tolerance is ±3%

Following Luminous Flux Ranking is applied. (IF=65mA, Ta=25°C)	
Rank	Luminous Flux (lm)
3	30.8 ~ 32.3
4	32.3 ~ 33.8
5	33.8 ~ 35.3
6	35.3 ~ 36.8

- Luminous Intensity Measurement Tolerance is ±5%

Following Chromaticity Ranking is applied. (IF=65mA, Ta=25°C)	
Rank	D0
Color Space	MacAdam 3-step
Center Point	X=0.3123, y=0.3282
Majoraxis Length a	0.009914
Minoraxis Length b	0.003499
Orientation θ°	65.3



- Color Coordinates Measurement Tolerance is ±0.005.
- CRI Measurement Tolerance is ±4
- The property value is at the time of the shipment, and the property value changes at time.

**Results of Reliability Test**

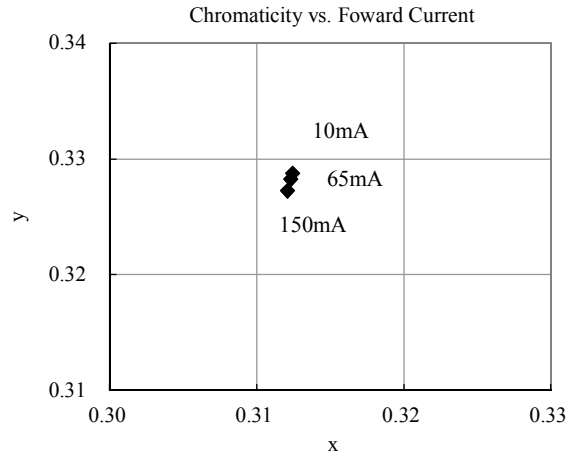
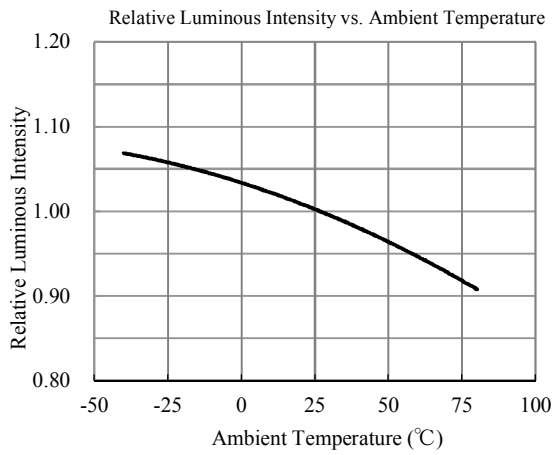
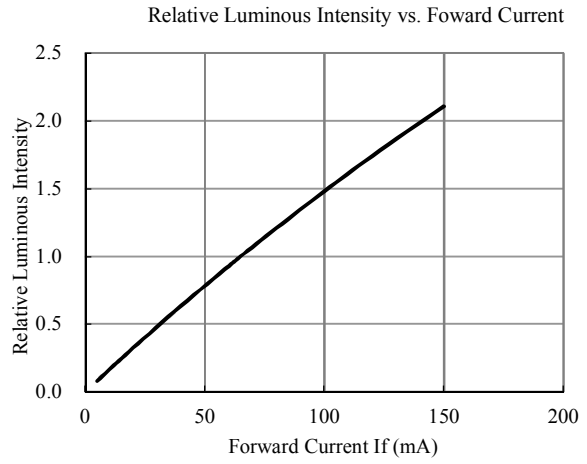
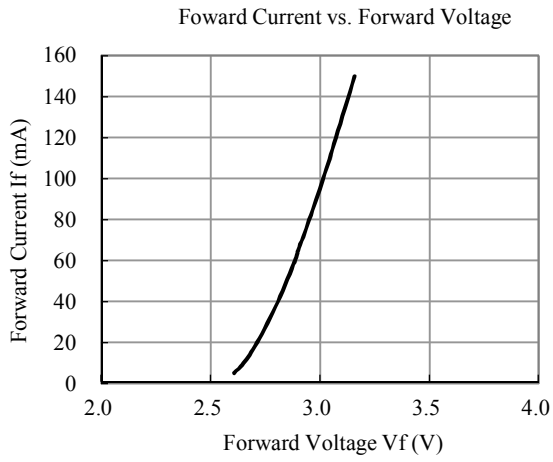
Test Item	Standard Test Method * JEITA ED-4701	Test Condition	Results
Operating Test	-	T <sub>a</sub> =25°C, I <sub>F</sub> =65mA, t=1000h	0/10
High Temp. Operating Test	-	T <sub>a</sub> =85°C, I <sub>F</sub> =65mA, t=1000h	0/10
High Humidity Operating Test	-	T <sub>a</sub> =60°C, RH=90%, I <sub>F</sub> =65mA, t=1000h	0/10
Low Temp. Operating Test	-	T <sub>a</sub> =-40°C, I <sub>F</sub> =65mA, t=1000h	0/10
High Temp. Storage Test	200 201	T <sub>a</sub> =-100°C, t=1000h	0/10
Low Temp. Storage Test	200 202	T <sub>a</sub> =-40°C, t=1000h	0/10
High Humidity Storage Test	100 103	T <sub>a</sub> =60°C, RH=90%, t=1000h	0/10
Temperature Cycle Test	100 105	T <sub>a</sub> =(-40°C, 30min.~25°C, 5min.~100°C, 30min.) ×100 cyc	0/10
Temperature and humidity cycle test	200 203	T <sub>a</sub> =(-10°C~65°C), RH=(90~96) ×10cyc 24h/cyc	0/10
Resistance to Soldering Heat (Reflow Soldering)	300 301	T <sub>sld</sub> =260°C, 10sec, 2times	0/10
Vibration Test	400 403	100~2000~100Hz, 4min, x, y, and the direction of z for 4 cyc.	0/10
ESD Test	300 304	HBM, 2KV, 1.5kΩ, 100pF, 2times	0/10
Fall Test	-	H=1m, maple tree board, 10times No broken	0/10
Solderability Test	303 303A	T <sub>sld</sub> =245±5°C, 5sec, Pb free solder(Sn-3.0Ag-0.5Cu)	0/10

\* Number : JEITA ("Japan Electronics and Information Technology Industries Association") standard methods are used.

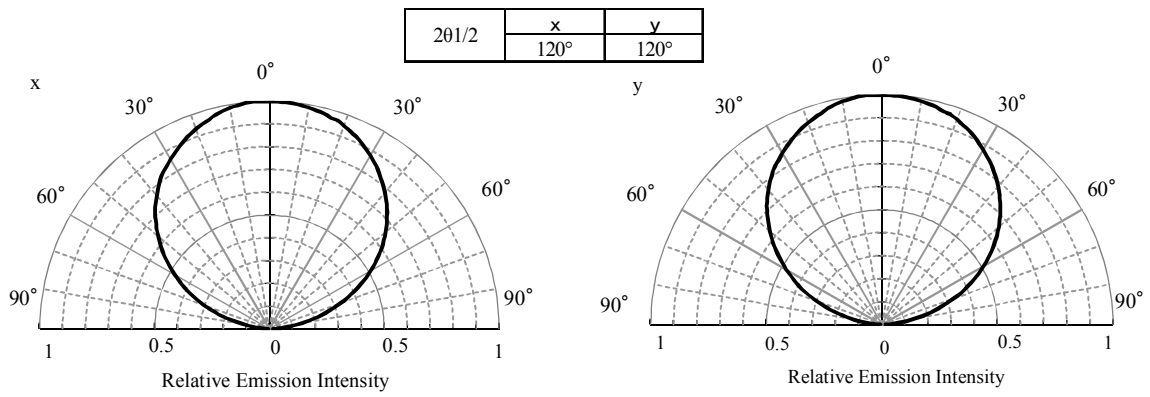
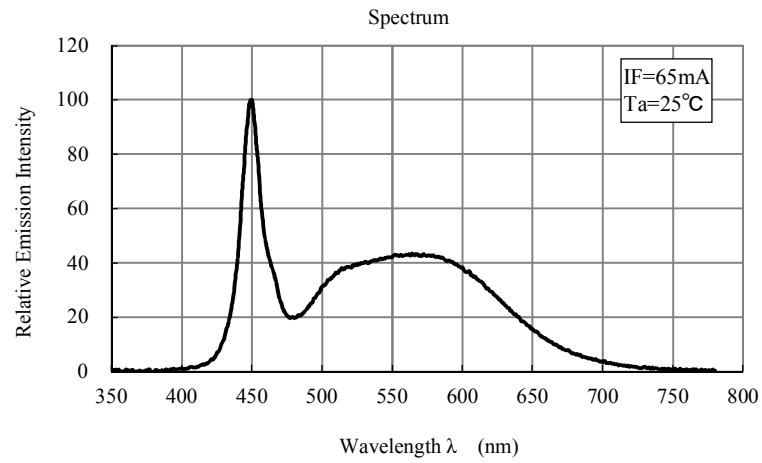
**Criteria for Judging the Damage**

Item	Symbol	Test Condition	Limit	
			Min.	Max.
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =65mA	—	Initial Value ×1.1
Luminous Flux	Φ <sub>V</sub>	I <sub>F</sub> =65mA	Initial Value ×0.7	—
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	—	5μA

**Typical Characteristics**



- The data shown above are examples and are not guaranteed.



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**Disclaimer**

Product specifications and data shown in this product catalog are subject to change without notice for the purposes of improving product performance, reliability, design, or otherwise.

Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements.

Product data and parameters may vary by user application and over time.

Products shown in this catalog are intended to be used for general electronic equipment. Products are not guaranteed for applications where product malfunction or failure may cause personal injury or death, including but not limited to life-supporting / saving devices, medical devices, safety devices, airplanes, aerospace equipment, automobiles, traffic control systems, and nuclear reactor control systems.