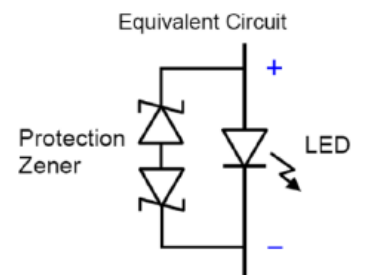
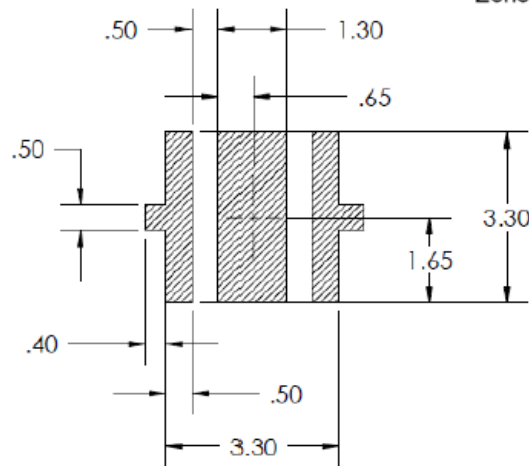
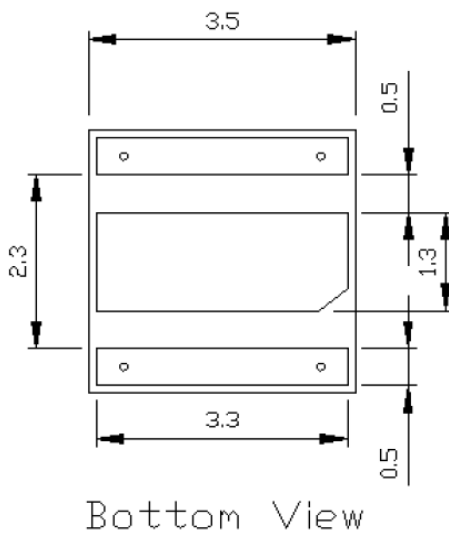
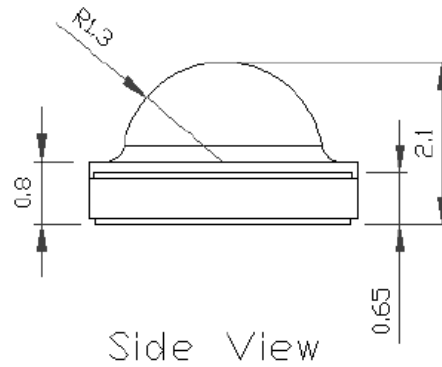
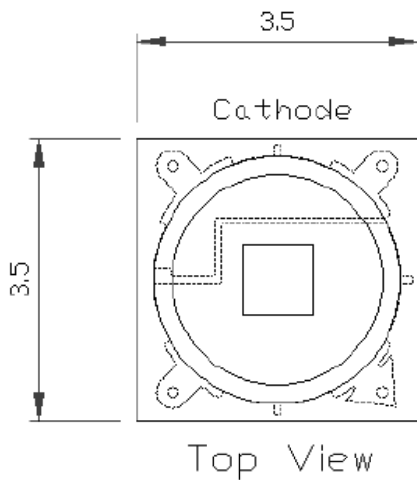
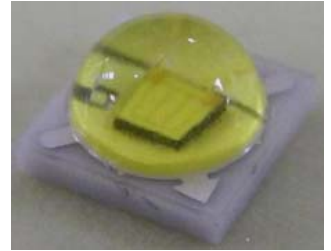


## ■ Package Dimension:



Part NO.	Chip	Emitting Color	Lens Color
AL-01CEWW1WCP-A2	InGaN	Warm White	Water Clear

### Notes:

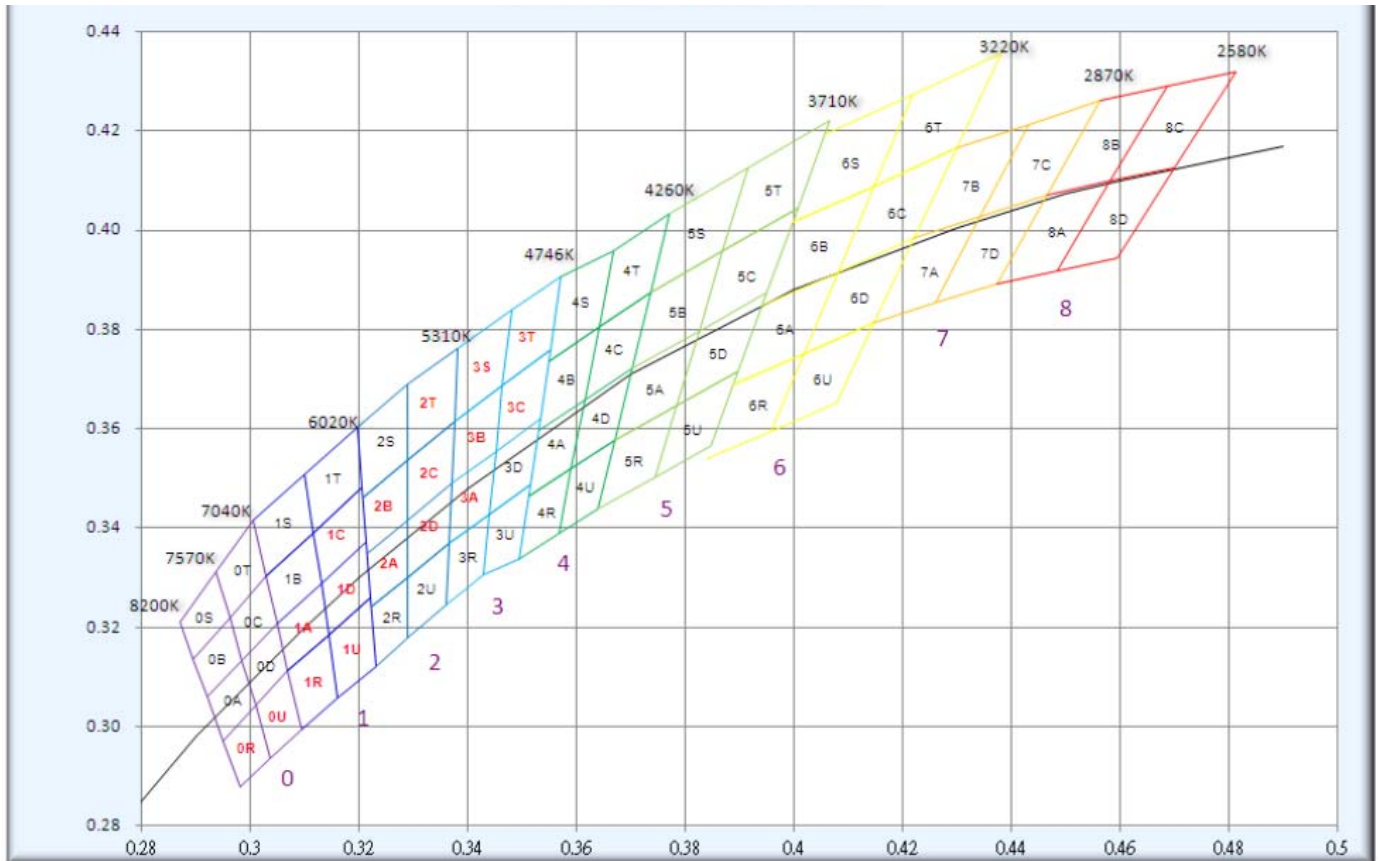
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}$  (.010") unless otherwise noted.
3. Protruded resin under flange is 1.0mm(.04") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.
6. This data-sheet only valid for six months.

■ Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Flux	$\Phi_V$	---	110	---	Lm	I <sub>F</sub> =350mA
Forward Voltage	V <sub>F</sub>	---	3.1	3.5	V	I <sub>F</sub> =350mA
Chromaticity Coordinate	X	---	0.382	---	---	I <sub>F</sub> =350mA
	Y	---	0.380	---	---	
Color Temperature	CCT	---	4000	---	K	I <sub>F</sub> =350mA
Color Render Index	CRI	70	---	---	---	I <sub>F</sub> =350mA
Reverse Current	I <sub>R</sub>	---	---	5	μA	V <sub>R</sub> =5V
Thermal Resistance	R <sub>th</sub>	---	9	---	°C/W	---
LED Junction Temp	T <sub>j</sub>	---	---	150	°C	---
Emission Angle	2θ <sub>1/2</sub>	---	120	---	Deg	I <sub>F</sub> =350mA

■ Chromaticity Coordinate

**LED BINNING**



■ Chromaticity Coordinate

region	x	y	region	x	y	region	x	y	region	x	y
5A	0.3702	0.3722	5B	0.3736	0.3874	5C	0.3869	0.3958	5D	0.3825	0.3798
	0.3825	0.3798		0.3869	0.3958		0.4006	0.4044		0.3950	0.3875
	0.3783	0.3646		0.3825	0.3798		0.3950	0.3875		0.3898	0.3716
	0.3670	0.3578		0.3702	0.3722		0.3825	0.3798		0.3783	0.3646
5R	0.3670	0.3578	5S	0.3771	0.4034	5T	0.3916	0.4127	5U	0.3783	0.3646
	0.3783	0.3646		0.3916	0.4127		0.4064	0.4221		0.3898	0.3716
	0.3743	0.3502		0.3869	0.3958		0.4006	0.4044		0.3848	0.3565
	0.3640	0.3440		0.3736	0.3874		0.3869	0.3958		0.3743	0.3502
6A	0.3941	0.3848	6B	0.3996	0.4015	6C	0.4146	0.4089	6D	0.4080	0.3916
	0.4080	0.3916		0.4146	0.4089		0.4299	0.4165		0.4221	0.3984
	0.4017	0.3751		0.4080	0.3916		0.4221	0.3984		0.4147	0.3814
	0.3889	0.3690		0.3941	0.3848		0.4080	0.3916		0.4017	0.3751
6R	0.3889	0.3690	6S	0.4054	0.4191	6T	0.4217	0.4273	6U	0.4017	0.3751
	0.4017	0.3751		0.4217	0.4273		0.4382	0.4356		0.4147	0.3814
	0.3957	0.3596		0.4146	0.4089		0.4299	0.4165		0.4077	0.3652
	0.3840	0.3540		0.3996	0.4015		0.4146	0.4089		0.3957	0.3596
7A	0.4221	0.3984	7B	0.4299	0.4165	7C	0.4430	0.4212	7D	0.4342	0.4028
	0.4342	0.4028		0.4430	0.4212		0.4562	0.4260		0.4465	0.4071
	0.4259	0.3853		0.4342	0.4028		0.4465	0.4071		0.4373	0.3893
	0.4147	0.3814		0.4221	0.3984		0.4342	0.4028		0.4259	0.3853
8A	0.4465	0.4071	8B	0.4562	0.4260	8C	0.4687	0.4289	8D	0.4582	0.4099
	0.4582	0.4099		0.4687	0.4289		0.4813	0.4319		0.4700	0.4126
	0.4483	0.3919		0.4582	0.4099		0.4700	0.4126		0.4593	0.3944
	0.4373	0.3893		0.4465	0.4071		0.4582	0.4099		0.4483	0.3919

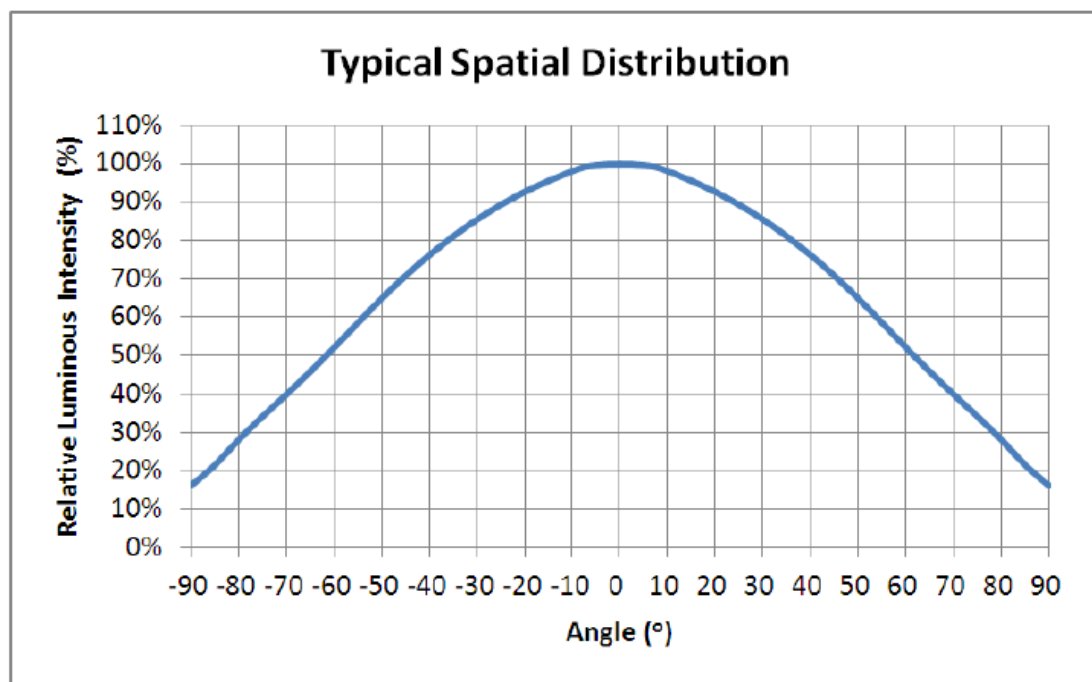
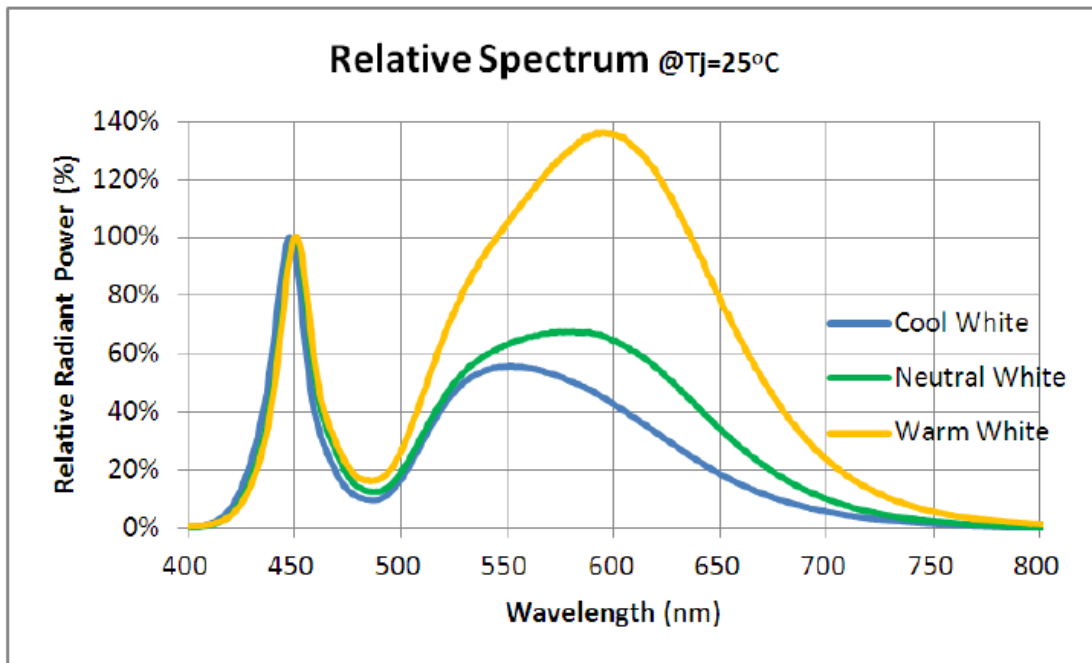
## ■ Bin Code

CW	Bin Code (Region)									
	0R	1A	1C	1D	2A	2B	2C	3A	3B	3C
	0U	1R	1U		2D	2T		3S	3T	
NW	5A	5B	5C	5D	5R	5S	5T	5U		
WW3000K	7A	7B	7C	7D						
WW2700K	8A	8B	8C	8D						

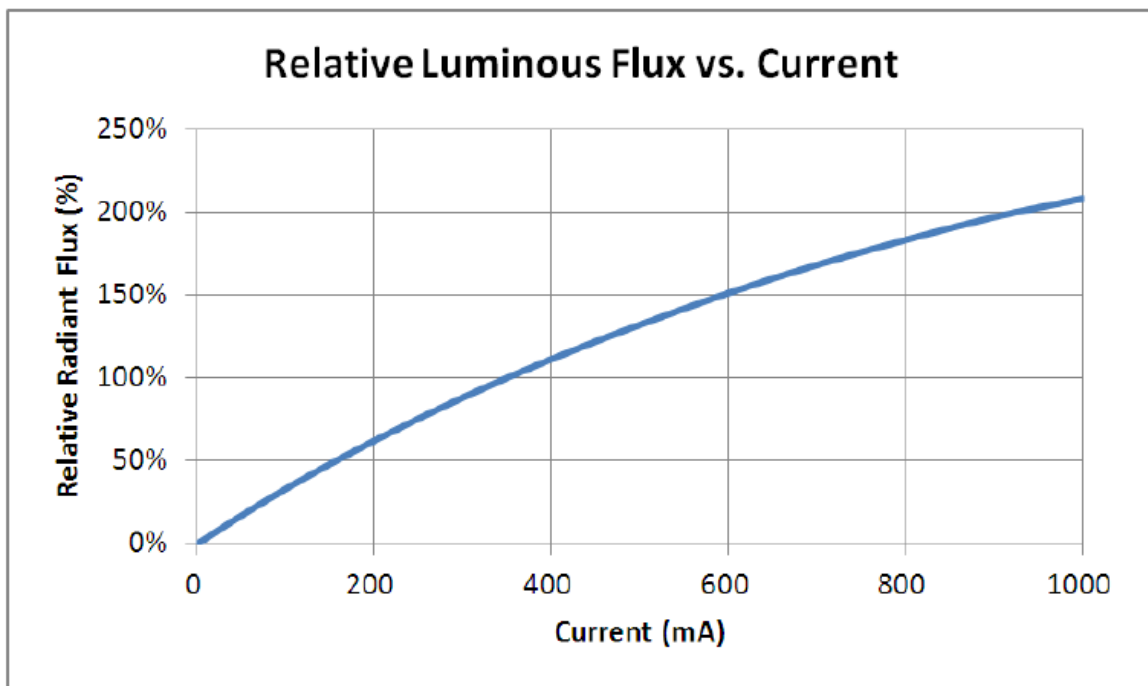
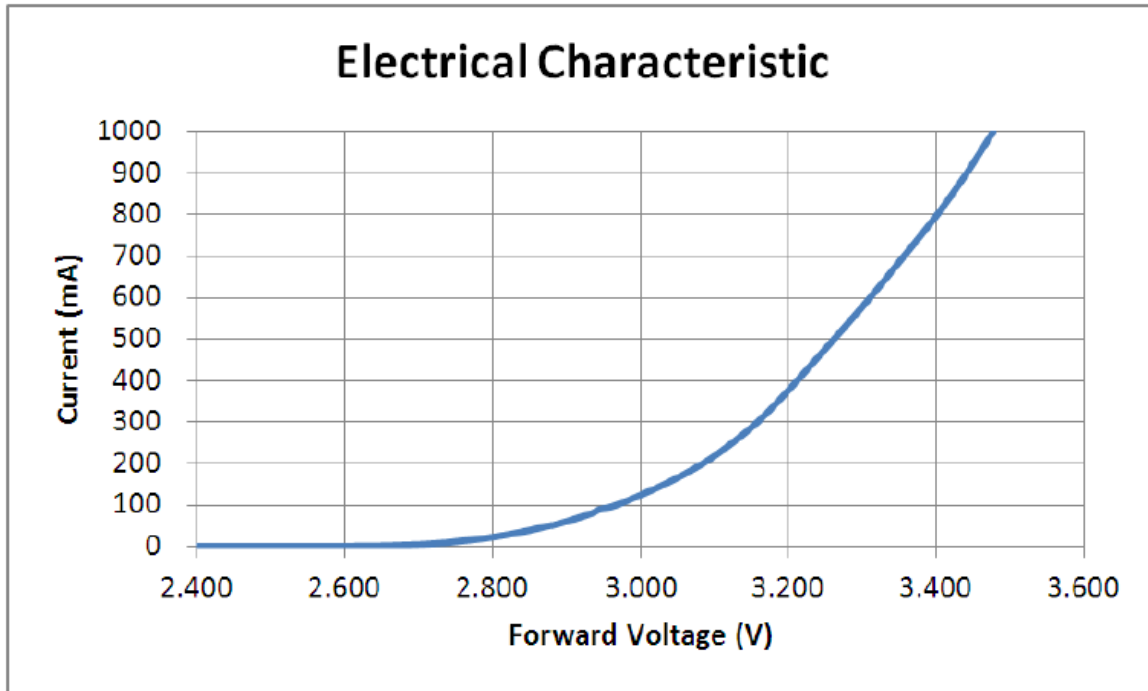
Bin	P4	Q2	Q3	Q4	Q5	R2	R3	R4	R5
Flux(lm) @350 mA	80.6	87.4	93.9	100	107	114	122	130	139
Flux(lm) @700 mA	143	155	167	178	190	203	217	231	247
Flux(lm) @1000 mA	185	201	216	230	246	262	281	299	320

Bin	0F	0G	0H						
Vf(v)	2.75-3.00	3.00-3.25	3.25-3.50						
CW Bin				Q4	Q5	R2	R3	R4	R5
Flux(lm)				100-107	107-114	114-122	122-130	130-139	139-148
NW Bin			Q3	Q4	Q5	R2			
Flux(lm)			93.9-100	100-107	107-114	114-122			
WW Bin	P4	Q2	Q3	Q4	Q5				
Flux(lm)	80.6-87.4	87.4-93.9	93.9-100	100-107	107-114				

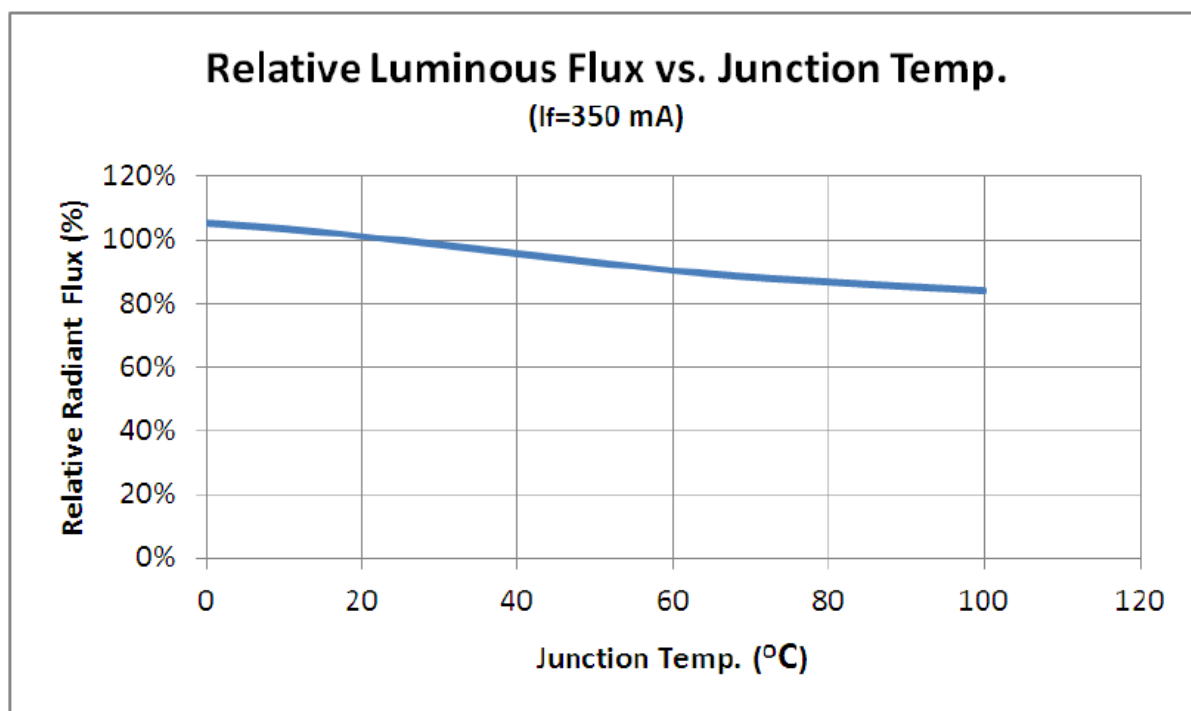
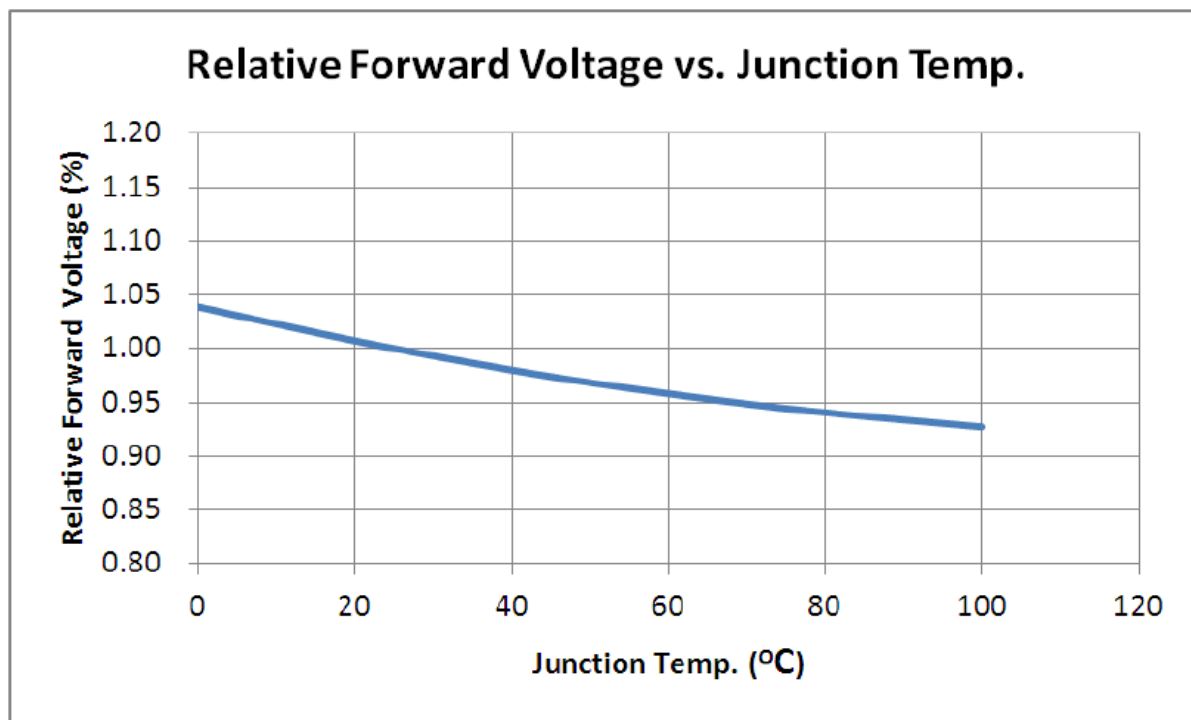
■ **Optical Characteristics**



■ **Optical Characteristics**

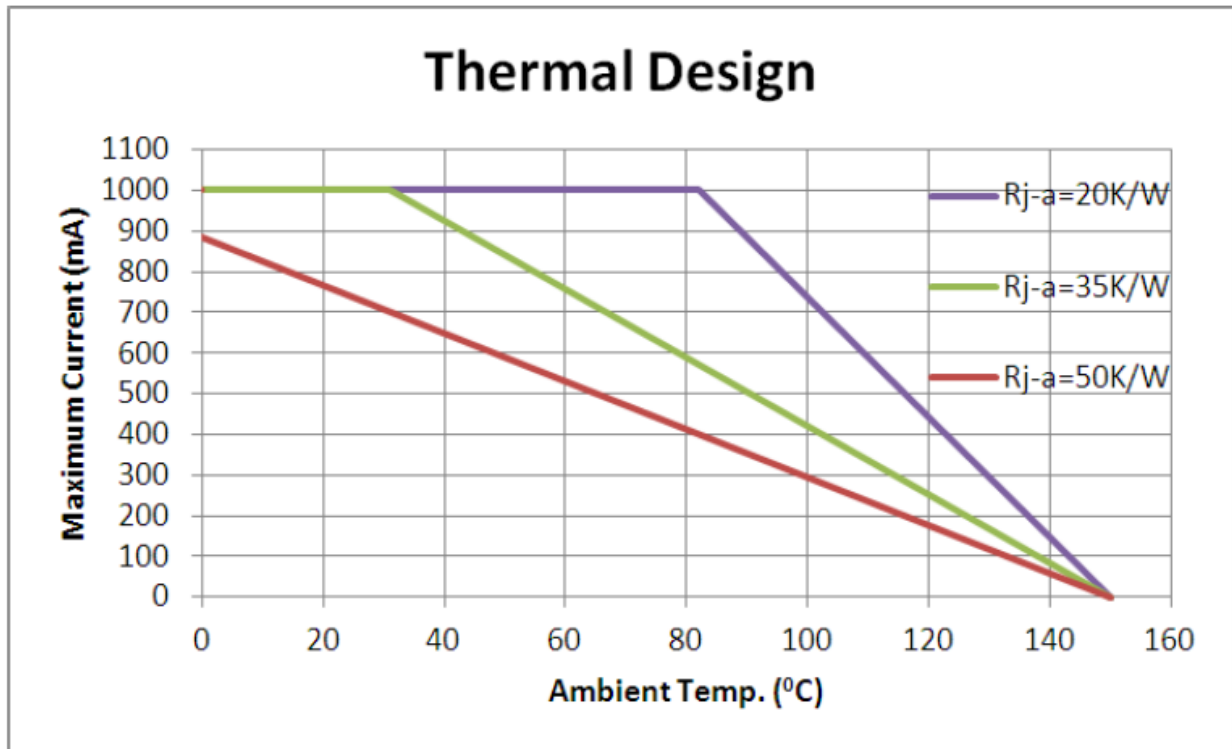


■ **Optical Characteristics**





■ **Optical Characteristics**



**■ Test item and Results of reliability**

Test Item	Test Conditions	Duration/ Cycle	Number of Damage	Reference
Temperature Cycle	-40°C 30min ↑↓25°C (5 min) 100°C 30min	100 cycles	0/22	JEITA ED-4701 300 303
Thermal Shock	-40°C 30min ↑↓5sec 110°C 30min	100 cycles	0/22	JEITA ED-4701 200 303
High Temperature Storage	T <sub>a</sub> =85°C	1000 hrs	0/22	EIAJED-4701 200 201
Humidity Heat Storage	T <sub>a</sub> =85°C RH=85%	1000 hrs	0/22	EIAJED-4701 100 103
Low Temperature Storage	T <sub>a</sub> =-40°C	1000 hrs	0/22	EIAJED-4701 200 202
Life Test	T <sub>a</sub> =25°C I <sub>f</sub> =1000mA	1000 hrs	0/22	Tested with Optotech standard
High Humidity Heat Life Test	60°C RH=90% I <sub>f</sub> =700mA	1000 hrs	0/22	Tested with Optotech standard
Low Temperature Life Test	T <sub>a</sub> =-40°C I <sub>f</sub> =1000mA	1000 hrs	0/22	Tested with Optotech standard
ESD(HBM)	1kV at 1.5kΩ;100pf	3 Times	0/22	MIL-STD-883D

■ Packaging 800pcs/Reel

Tape and Reel

