
Samples approval sheet

Customer name : _____

Production name : _____

Model : DB3014

Part number : _____

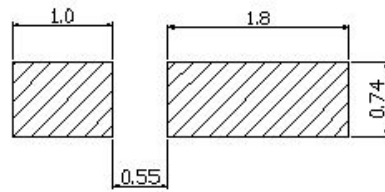
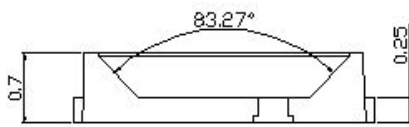
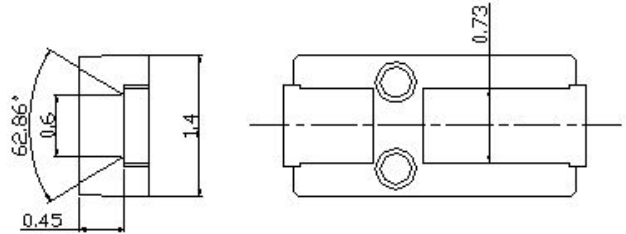
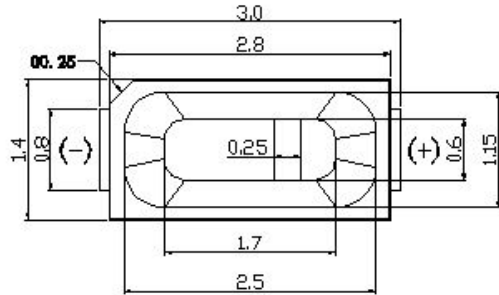
Date : 2014-3-26

Model :

DB3014

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Outline dimensions :



Pin Connection



Unit	Tolerance		Lens color	Emission color
mm	±0.2mm			

Remark : P/N & Model in samples approval sheet can be used to inquire , please provide corresponding P/N& model if customer need .

Photoelectricity Parameter

Ambient temperature : 25°C

humidity : RH60%

Item	Symbol	Test condition	Min	Type	Max	Unit
Forward voltage	VF	IF=30mA	3.0	—	3.4	V
Reverse current	IR	VR=5V	—	—	10	μA
Luminous intensity	IV	IF=30mA	9	—	12	lm
Color Temperature	CCT	IF=30mA	2800	—	13000	K
Color Rendering Index	CRI	IF=30mA	70	—	90	Ra
Spectrum line half width	$\Delta \lambda$	IF=30mA	—	—	—	nm
Viewing Angle	$2\theta 1/2$	IF=30mA	120	—	140	deg

Remark : The tolerance of intensity:±15%, The tolerance of wave length:±1nm,The tolerance of forwards voltage: ±0.05V.
Only reference for above data when testing.

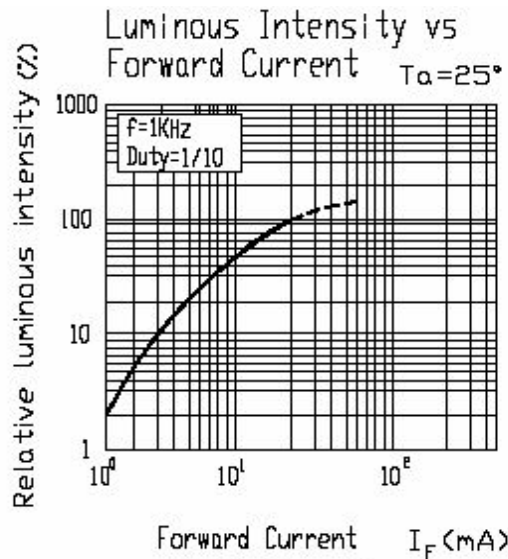
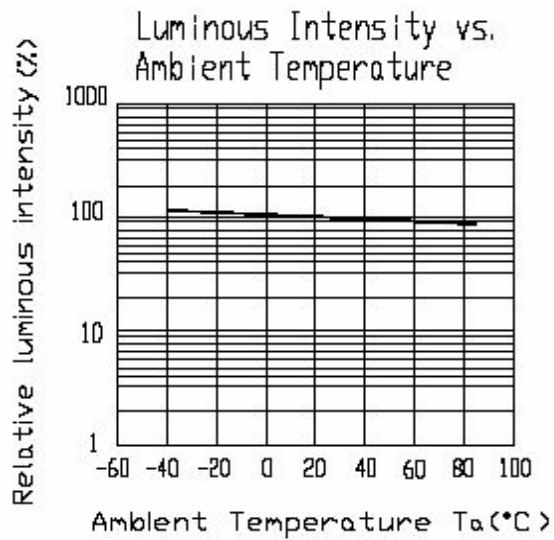
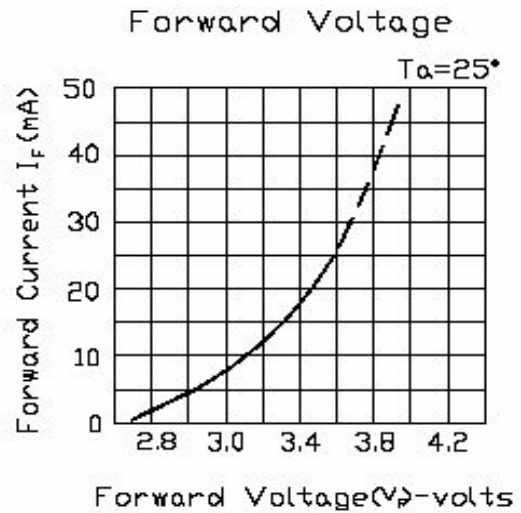
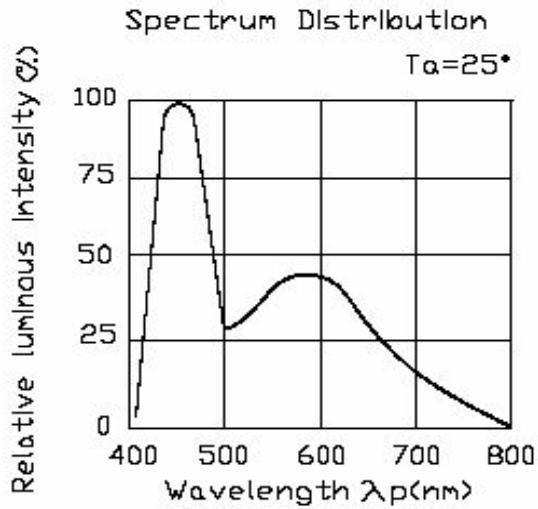
Absolute Maximum Rating

Ambient temperature : 25°C

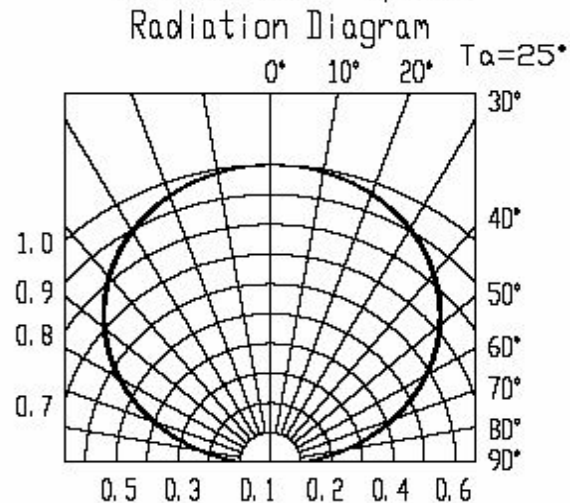
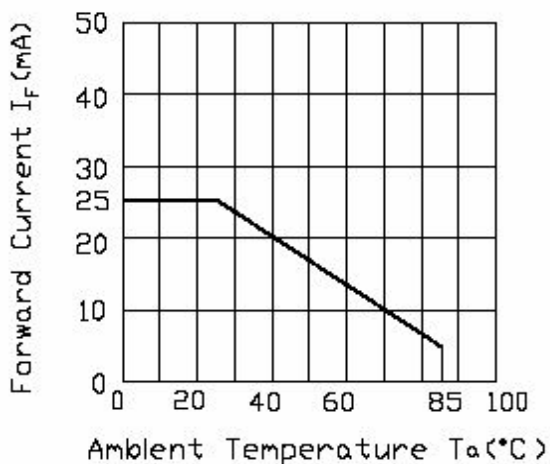
humidity : RH60%

Forward Current	IF	30	mA	---
Peck forward current	IFM	75	mA	F=1KHZ, (duty cycle) 1/10
Reverse Voltage	VR	15	V	---
Power Dissipation	Pm	100	mW	---
Operation temperature	Tamb	-25 ; +80	°C	---
Storage temperature	Tstg	-40 ; +60	°C	---
Soldering temperature	Tsol	240	°C	Soldering ≤ 3S

Typical photoelectricity characteristic curve chart



Forward Current Derating Curve



Reliability Test Project

Description	Item	Test criterion	Test condition	Test time	Qty	Fail qty
Life test	Life test(room temperature)	JIS7021:B4	Ta=25°C±5°C , IF=30mA	1000Hrs	22	0
Ambience test	High temperature store	JIS7021:B10 MIL-STD-202:210A MIL-STD-750:2031	Ta=85°C±5°C	1000Hrs	22	0
	Low temperature store	JIS7021:B12	Ta=-35°C±5°C	1000Hrs	22	0
	High temperature/ humidity test	JIS7021:B11 MIL-STD-202:103D	Ta=85°C±5°C RH=85%	1000Hrs	22	0
	Cold / Heat strike test	JIS7021:B4 MIL-STD-202:107D MIL-STD-750:1026	30min -10°C±5°C ←→ 100°C±5°C 5min 5min	50Cycles	22	0
	Cold and heat cycle test	JIS7021:A3 MIL-STD-202:107D MIL-STD-705:105E	5min 5min 5min -35°C~25°C~85°C~-35°C 30min 5min 30min 5min	50Cycles	22	0

Judging criterion:

Item	Symbol	Experiment condition	Criteria	
			Min.	Max.
Forward Voltage	V _F	I _F =60mA	----	Initial Datex1.1
Reverse Current	I _R	V _R =5V	----	30 μA
Luminous Intensity	I _V	I _F =60mA	Initial Datex0.8	----

Product Number Explanation

Color temperature		Bonding wire		CRI		Luminous intensity	
S	2800-3200K	C	Alloy wire	7	70	9	9-10LM
N	4000-4500K			8	80	10	10-12LM
W	6000-6500K	G	Gold wire	9	90	12	12-14LM
L-C	7100-8100K						
L-G	9000-13000K						