

1 . Part Number: LBF1048-45DXB

 2 . Structure: The LED light bar mounted LED dice (bare chip) on substrate by array
 (4serial 8parallel)

3 . Application: Lighting source

4 . Maximum Condition (T a = 2 5)

Item	Symbol	Condition	Unit
Admissibility disipation 1	Po	18	W
Forward Current 1	I _F	1.28	A
Operation Temperature	T _{op}	-30 ~ +85	
Preservation Temperature	T _{stg}	-40 ~ +100	
Solder Temperature 2	Ts	95	
Junction Temperature 3	Tj	125	

- 1 Input power and forward current are defined during the range of derating curve that is described in this specification.
- 2 Ts measurement place reference 9. Dimension
- 3 Junction Temperature : $T_j = T_s + R_{js} \times P_i$

5 . Electrical and optical Characteristics (T a = 2 5)

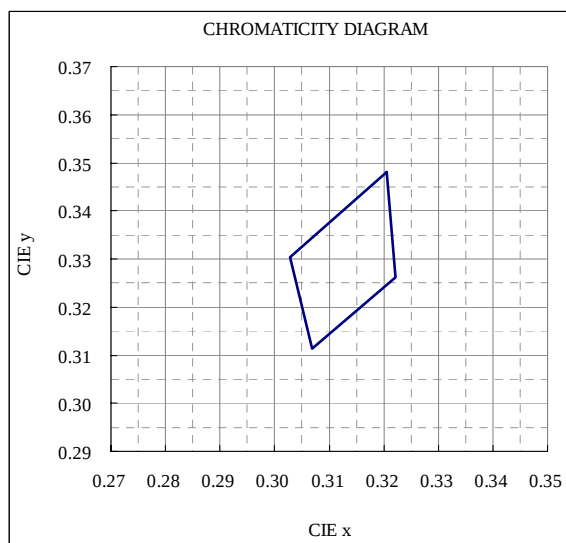
Item	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage 1	V _F	10.8	11.8	12.8	V	I _F = 360 mA
Luminous Flux 2	Φ _v	480	580	700	lm	I _F = 360 mA
Color Temperature	T _{cp}	6020	6530	7040	K	I _F = 360 mA
Deviation Color	duv	-0.003	+0.003	+0.009	-	I _F = 360 mA
General Color Rendering Index	Ra	-	75	-	-	I _F = 360 mA

1 : measurement tolerance : ± 3 %

2 : measurement tolerance : ± 7 %

DESIGN <i>T. Okagaki</i>	CHECK	APPROVAL <i>S. Uchida</i>	DATE: 2013/1/21	SPECIFICATION No. : Target SPEC
			REV. A	ROHM Co.,Ltd.

6 . Chromaticity coordinate (T a = 2 5 、 I F = 3 6 0 m A)



x	y
0.3205	0.3481
0.3028	0.3304
0.3068	0.3113
0.3221	0.3261

 measurement tolerance : ± 0.005

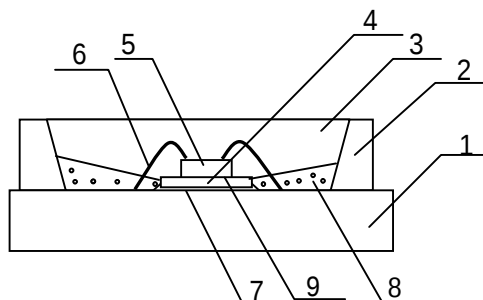
Range within 1Bar

x : R 0.015

y : R 0.020

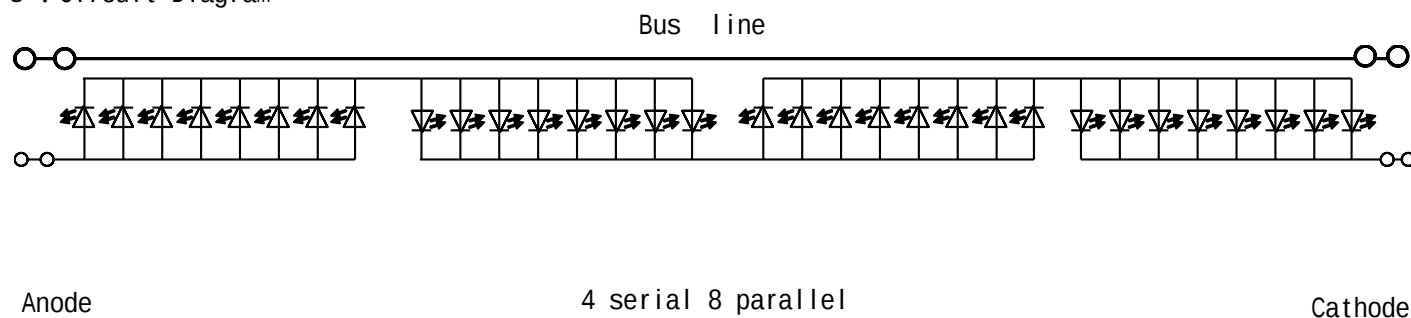
(R = max-min)

7 . Structure

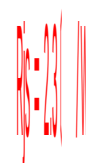
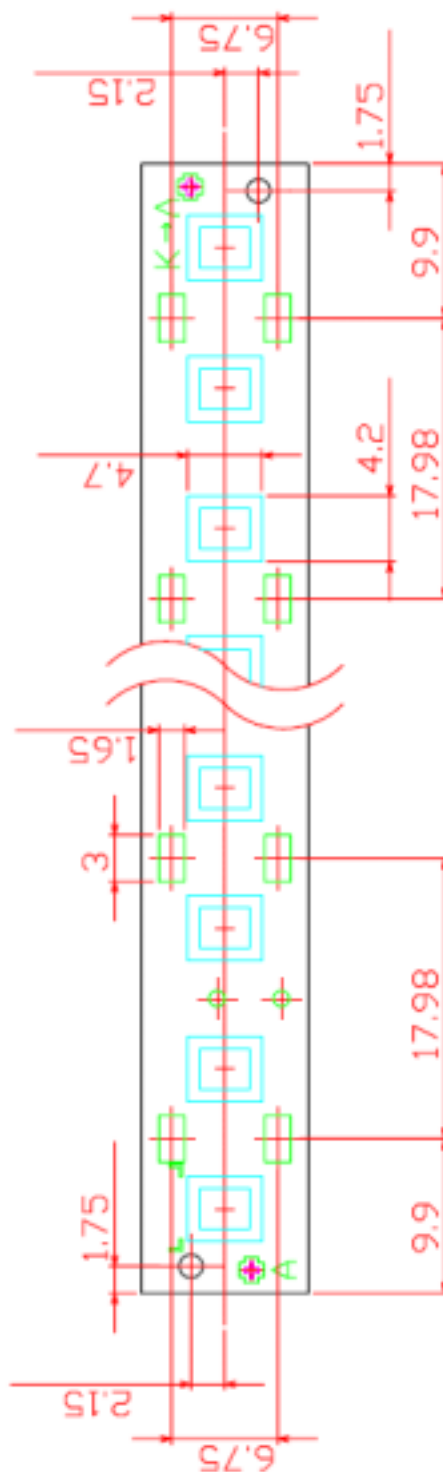
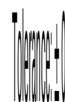


No	Parts Name	Material
1	Substrate	CEM-3 Substrate
2	White Resin	Silicone Resin
3	Resin	Silicone Resin
4	Sub Mount Substrate	Si
5	LED Die	InGaN on Sapphire
6	Bonding Wire	Au
7	Die Bond	Ag
8	White Resin	Silicone Resin (TiO ₂)
9	Die Bond	Silicone Resin

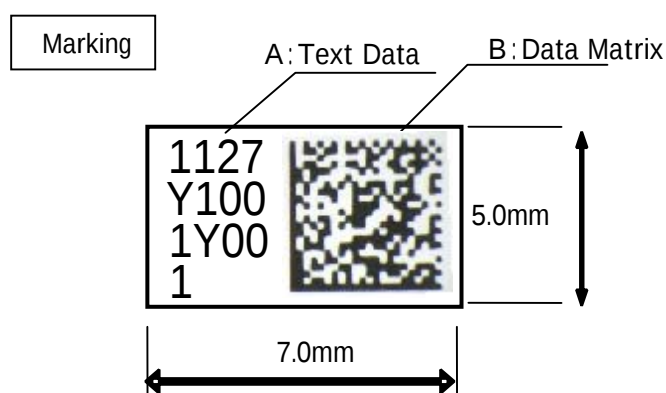
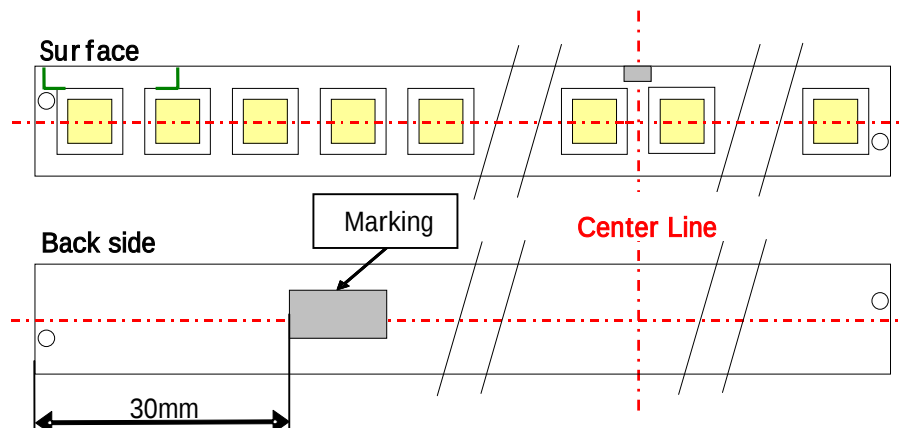
8 . Circuit Diagram



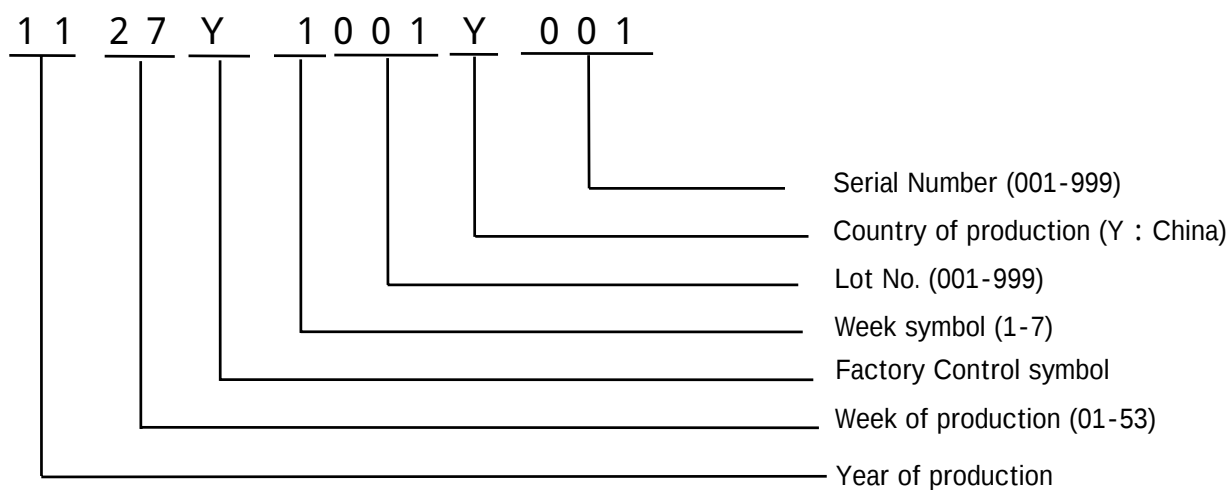
9 . Dimension



1 0 .Product Label



[A] Text Data



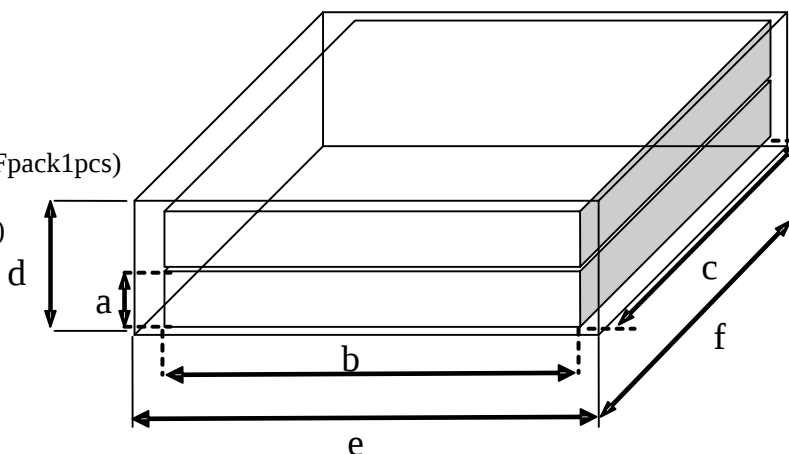
[B] Data Matrix

L B F 1 0 4 8 - 4 5 D X B	(13grids)	Part Number
1 1 2 7 Y 1 0 0 1 Y 0 0 1	(13grids)	Lot Number
1 2 3 4 5 6 7 8	(8grids)	Factory Control Part

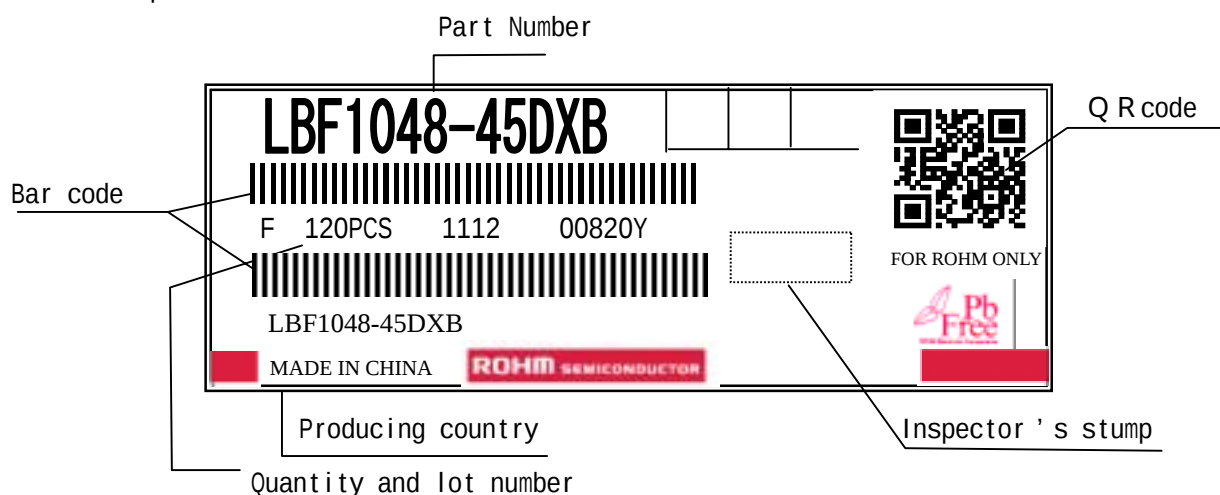
1 1 . Packing

【Package】

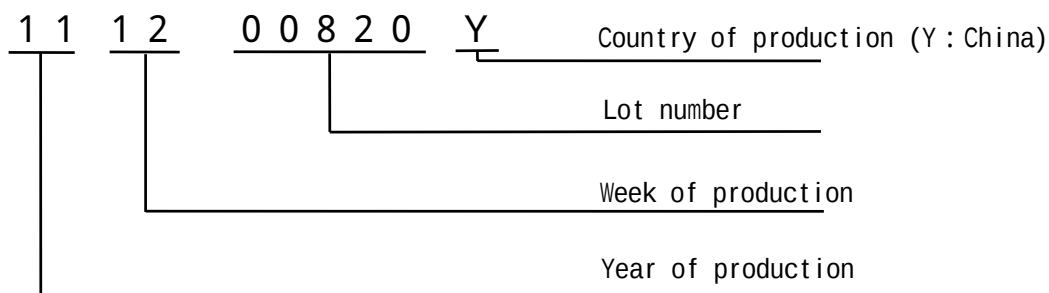
- (1) 12 Bars are on one film tray.
- (2) Inner package size (Fpack10pcs+vacant Fpack1pcs)
 (a)60 x (b)300 x (c)343 (Unit: mm)
- (3) Outer package size(inner package × 2pcs)
 (d)155 x (e)313 x (f)353 (Unit: mm)



【Label example】



【Lot number example】

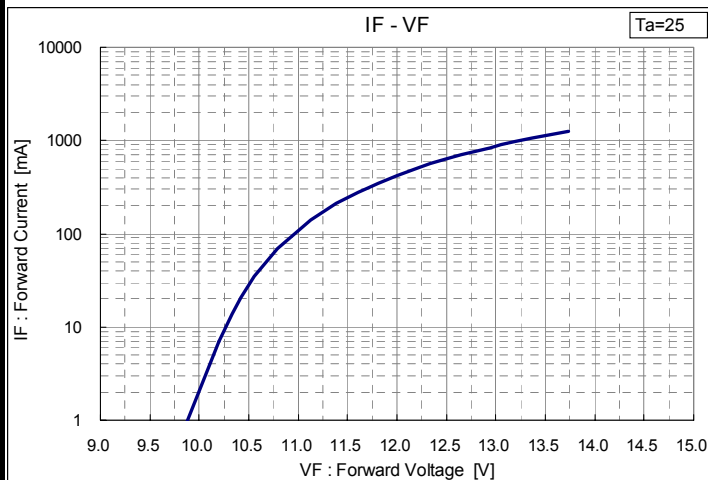


【Manufacturing factory (country of origin)】

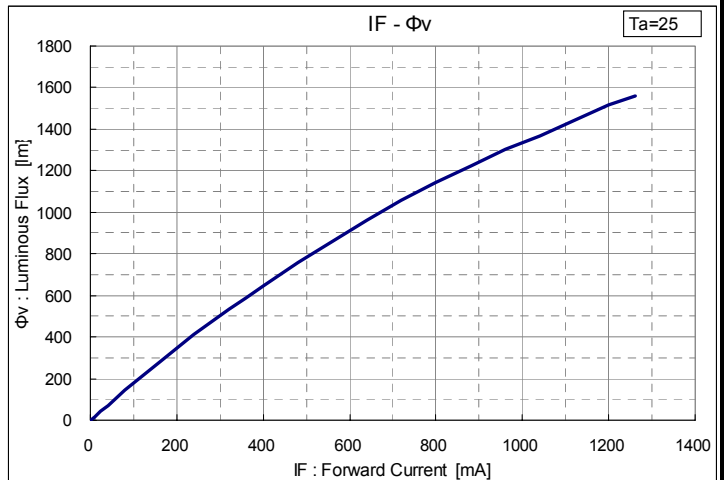
• ROHM SEMICONDUCTOR CHINA CO.,LTD. (China)

1 2 .Characteristics diagram

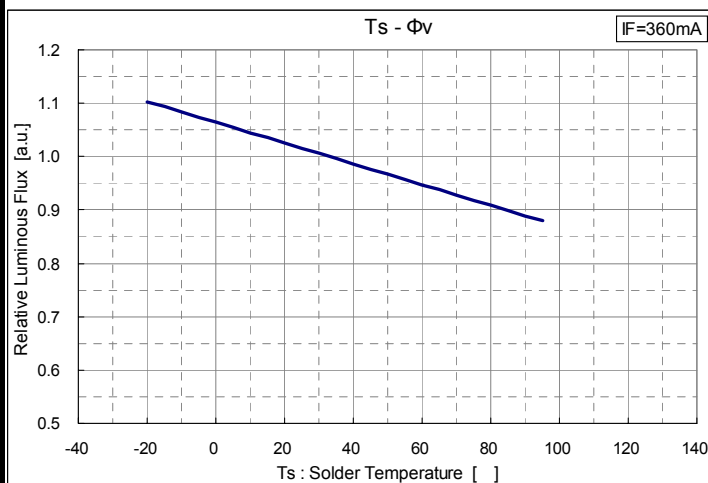
• IF - VF



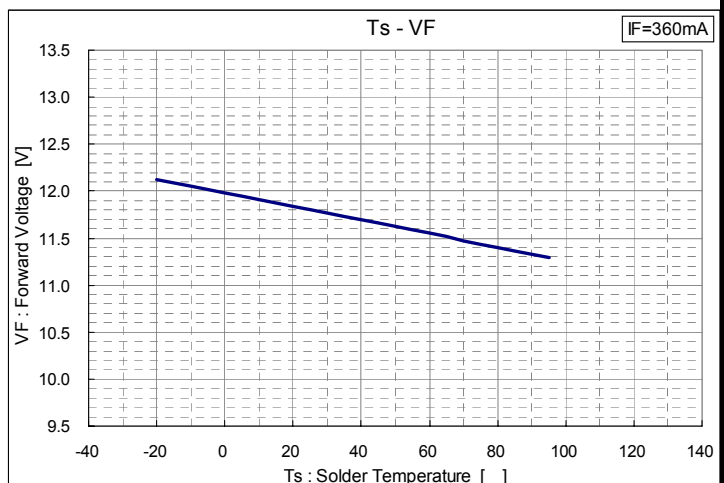
• IF - Φv



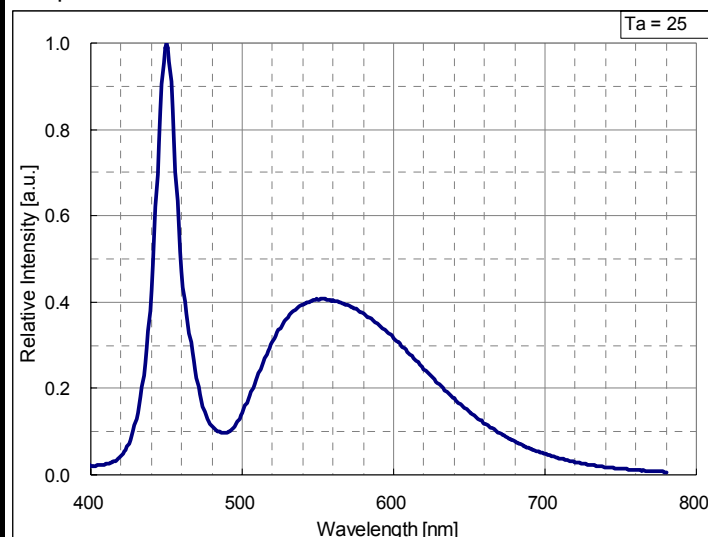
• Ts - Φv



• Ts - VF

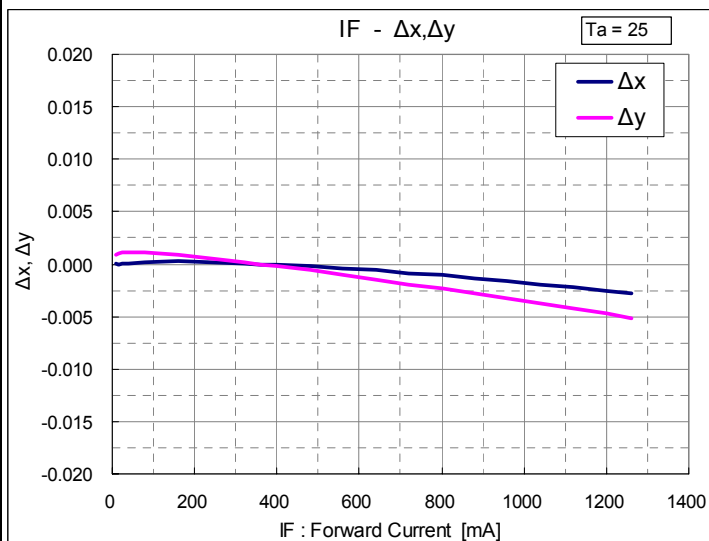


• Spectrum

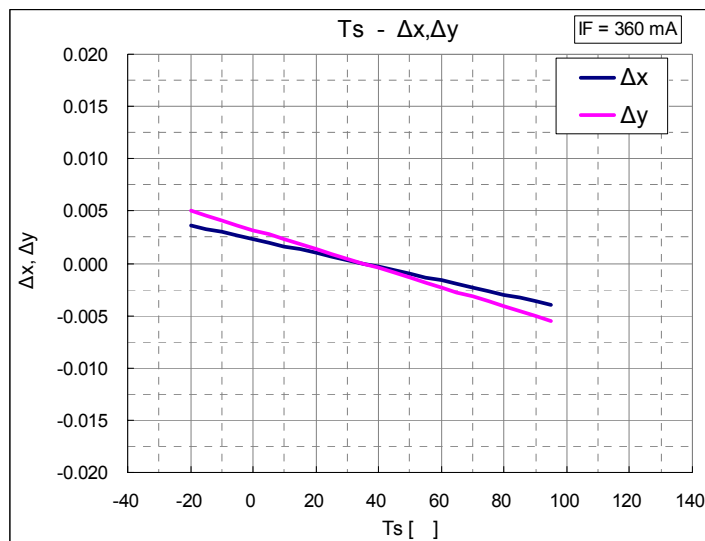


These characteristics data are
for reference purpose only.
(Not guaranteed data)

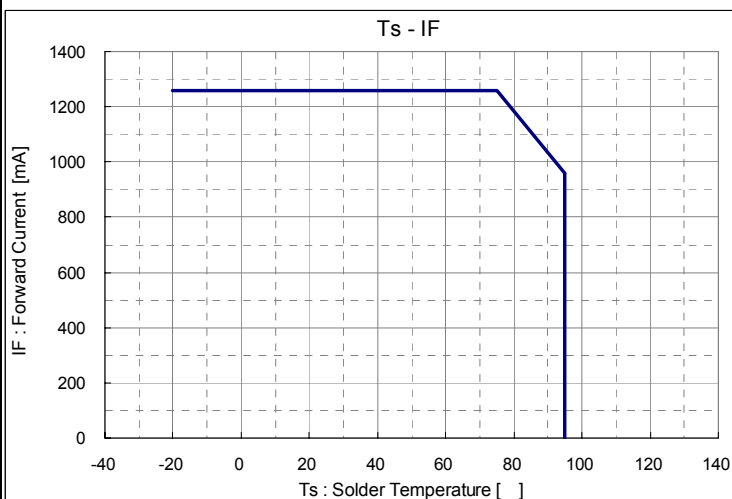
• IF - $\Delta x, \Delta y$



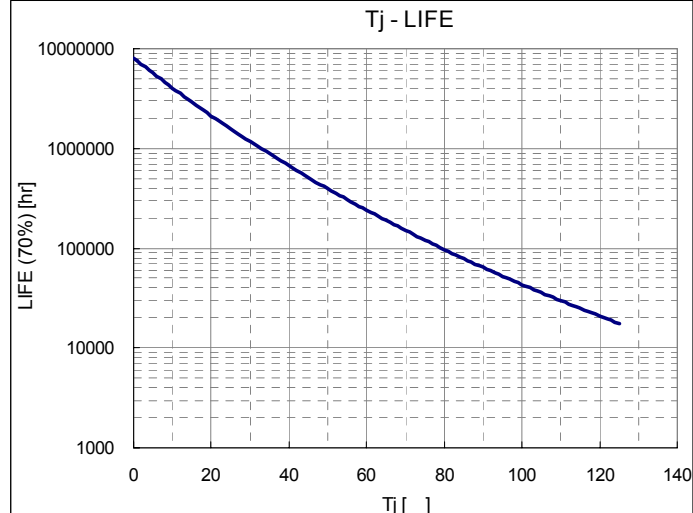
• Ts - $\Delta x, \Delta y$



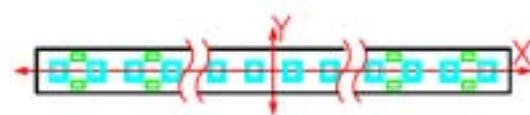
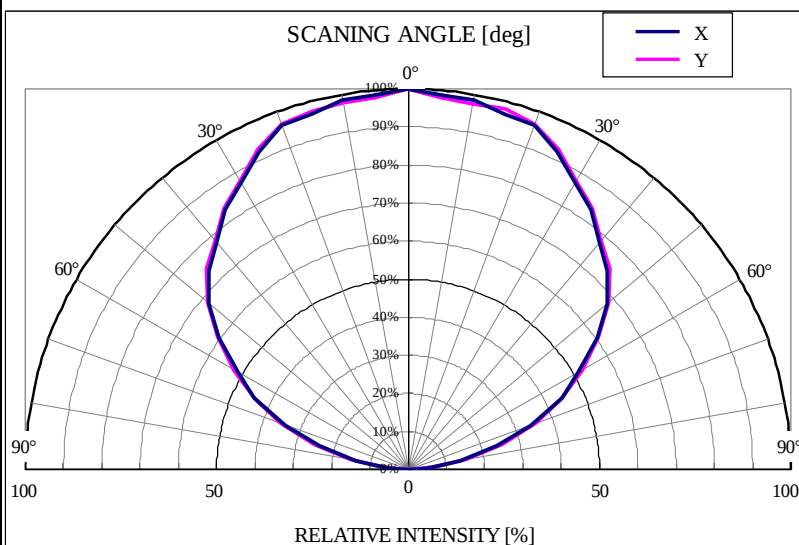
• Ts - IF



• Tj - Life



• Characteristics luminous intensity distribution



These characteristics data are
for reference purpose only.
(Not guaranteed data)

1 3 . Precautions and Prohibitions

During processing, mechanical stress on the surface should be minimized as much as possible.

If emission molding part were touched, it may affect optical characteristics due to wire open and stain. Attention has to be paid when installing.



In addition, please hold the side of bar in order to avoid any damage on illuminant portion.

