

Device	SMD LED LAMP	SPECIFICATION	Approval No.	
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FLASH WHITE LED

MODEL : BSW-176X

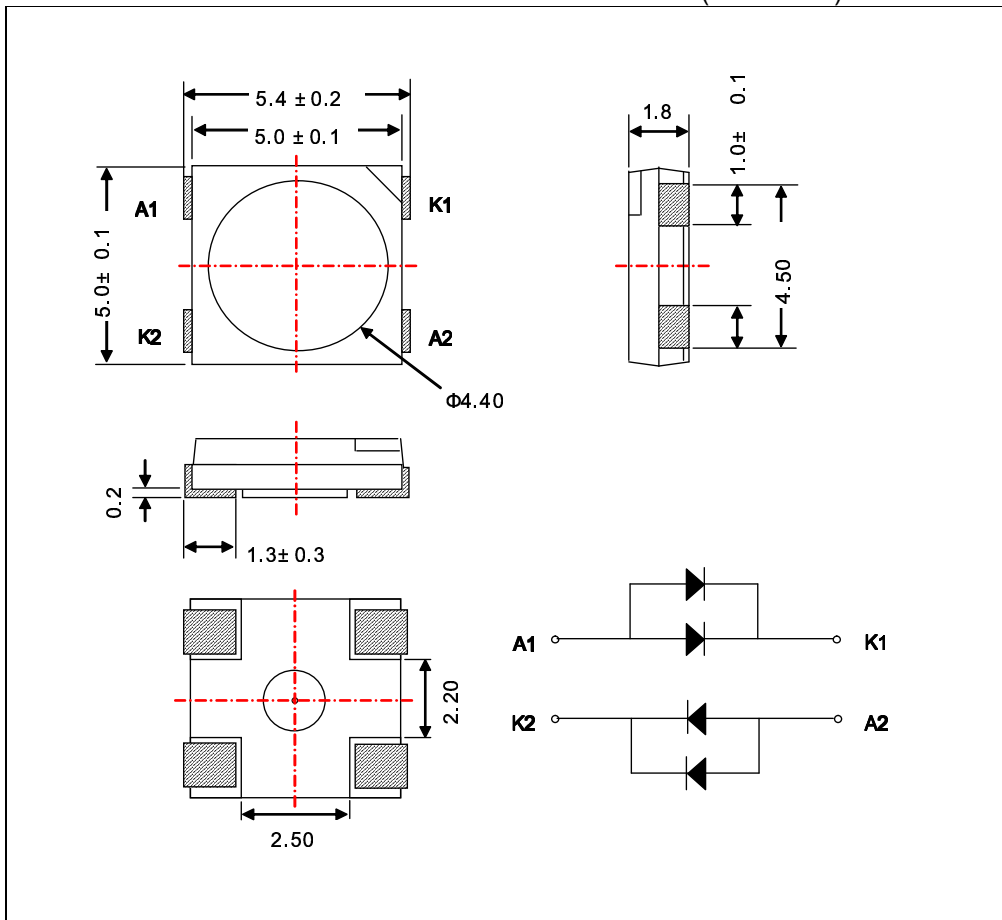
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◆ **Feature**

- SMD Top View Type (4Chip in 1Package)
- Small size(5.4X 5.0X 1.8mm)
- Package in 12mm tape on 7inch diameter reel
- Reel sealed in Moisture Barrier Bags
- Viewing Angle : extremely Wide (120⁰)

◆ **Outline Dimensions**

(unit : mm)



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◆ **Absolute maximum ratings (Ta=25°C)**

Item	Symbol	Rating	Unit
Reverse Voltage* ²	V _R	5	V
Forward Current* ²	I _F	40	mA
Pulse Forward Current* ¹ * ²	I _{FP}	100	mA
Power Dissipation	P _D	400	mW
LED Junction Temperature	T _j	100	°C
Operating Temperature	T _{opr}	-30 ~ 85	°C
Storage Temperature	T _{stg}	-40 ~ 100	°C

*¹ Duty ratio = 1/10 , T = 10msec

*² These values are based on one circuit

◆ **Electro-Optical Characteristics (Ta=25°C)**

Item	Symbol	Condition	Min	Typ	Max	Unit
Forward Voltage	V _F	I _F =80mA		3.4	3.8	V
Reverse Current	I _R	V _R =5V	-	-	5	μA
Luminous Intensity	I _v	I _F = 80mA	3.5	4.0	4.5	cd
Half Angle	θ _{1/2}	I _F =80mA	-	±60	-	deg

Rank (at $I_F = 80\text{mA}$)

VF Iv [cd]	3.0~3.2 V			3.2~3.4 V			3.4~3.6 V		
	a ¹	b ²	c ³	a ¹	b ²	c ³	a ¹	b ²	c ³
3.5~4.0	A1	A2	A3	A4	A5	A6	A7	A8	A9
4.0~4.5	B1	B2	B3	B4	B5	B6	B7	B8	B9
4.5~5.0	C1	C2	C3	C4	C5	C6	C7	C8	C9

Tolerance of Luminous Intensity(Iv) : $\pm 20\%$

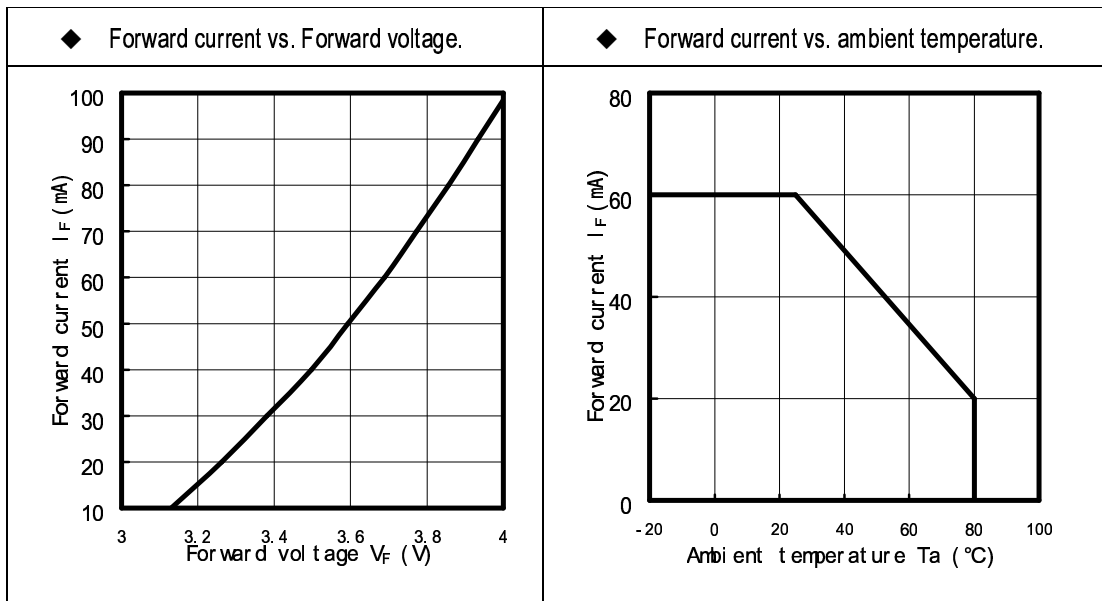
a¹ : X :0.30~0.31 Y: 0.30~0.31

b² : X :0.31~0.32 Y: 0.31~0.32

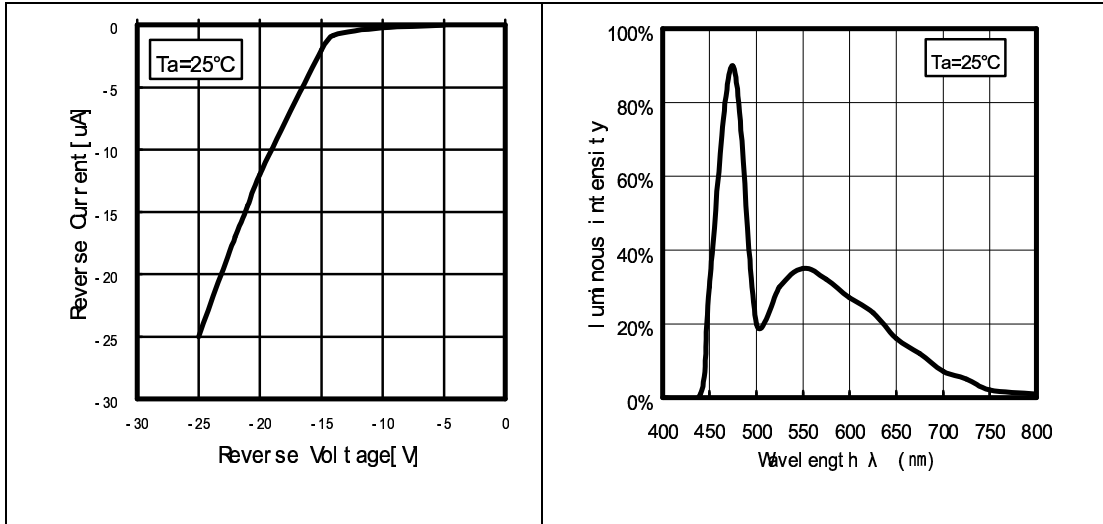
c³ : X :0.32~0.33 Y: 0.32~0.33

- ◆ BSW-176X LEDs are class 1 ESD sensitive.
Please observe appropriate precautions handling and processing.

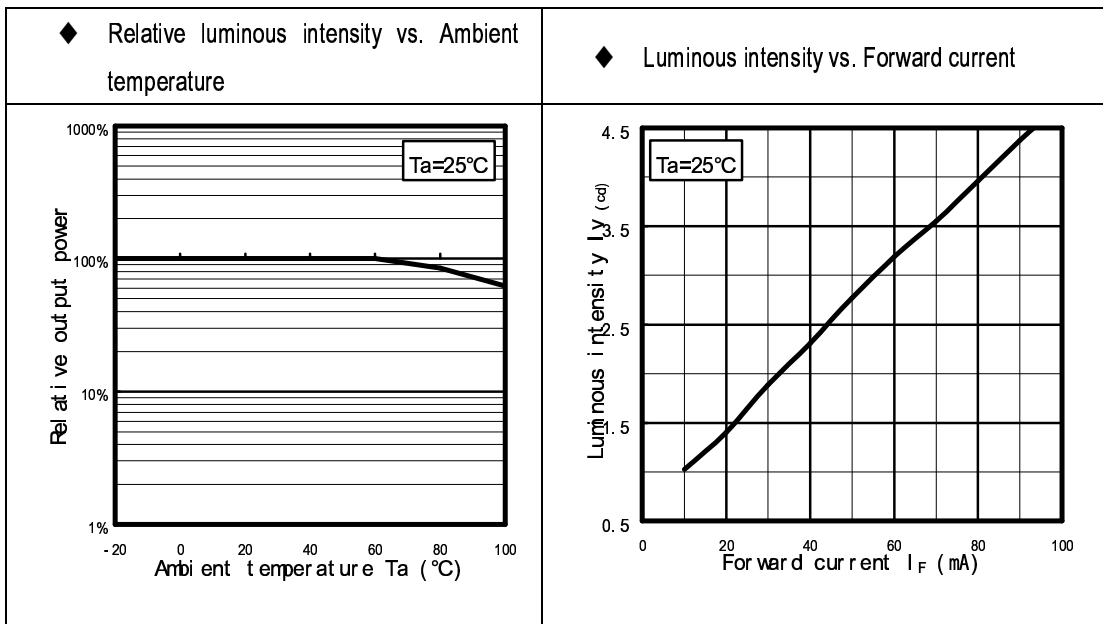
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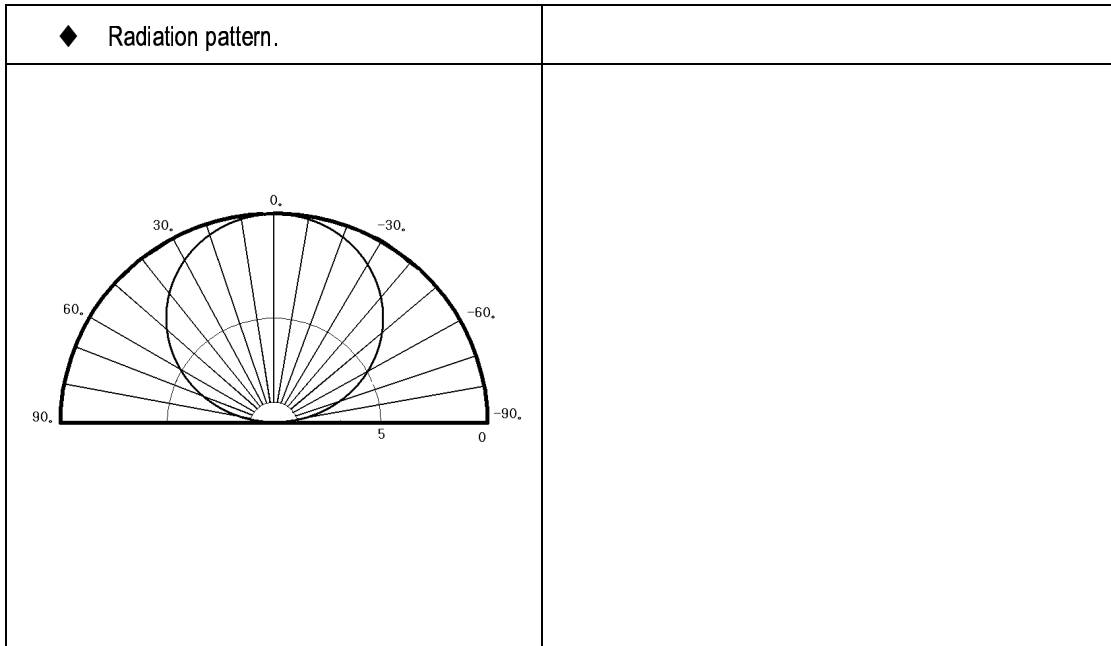


<p>◆ Reverse Current vs. Reverse Voltage</p>	<p>◆ Spectral distribution</p>
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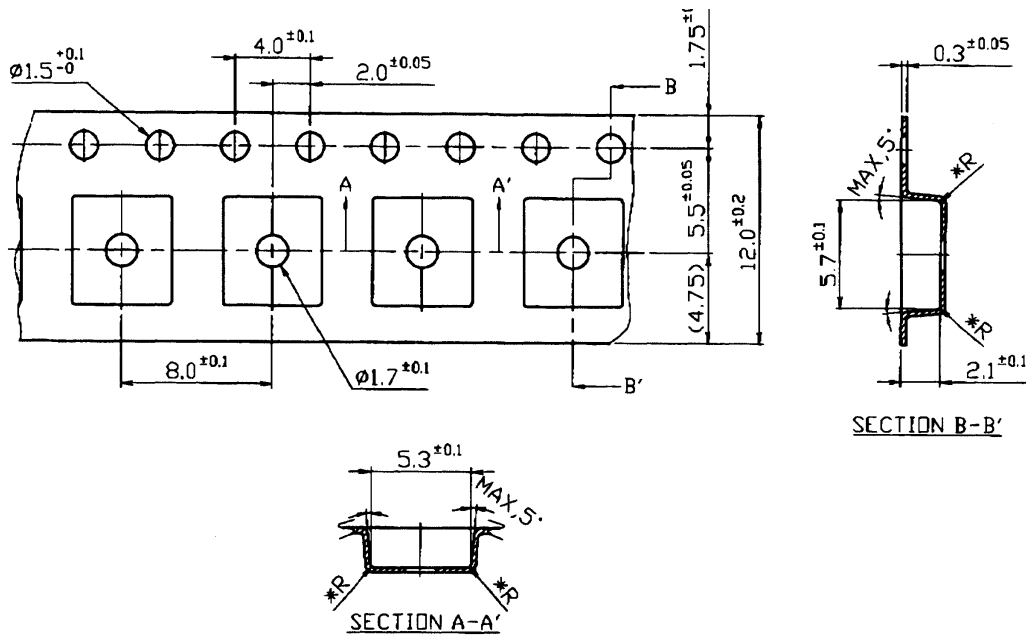




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◆ **Packing**

Product are packed in one taping reel of 800 pcs



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