



## Specification For Approval

**Customer:** \_\_\_\_\_

**Description:** **LED-LAMP**

**Part number:** **RL-LB1210 SERIES**

**Date:** **2007-09-26**

**Approved By:**

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**Prepared By:**

Approval	Check	Design	Sales

EXCEED PERSEVERANCE ELECTRONICS IND CO., LTD

[www.exceedledcn.com](http://www.exceedledcn.com)



# Light-emitting diode



- 500MM\*8MM SMD LIGHT RIBBON (30 LEDS)
- PRINTED CIRCUIT BOARD THICKNESS:0.2MM
- LED VIEW ANGLE:120 DEGREE
- PACKAGE:5 METERS/REEL

## ■ Absolute Maximum Rating

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	I <sub>F</sub>	200	mA
Peak Forward Current*	I <sub>FP</sub>	250	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	P <sub>D</sub>	2.4	W
Electrostatic discharge	E <sub>SD</sub>	800	V
Operation Temperature	T <sub>opr</sub>	-25~+80	°C
Storage Temperature	T <sub>stg</sub>	-40~+80	°C
Lead Soldering Temperature*	T <sub>sol</sub>	Max. 230°C for 5sec Max.	

\*I<sub>FP</sub> Conditions: Pulse Width ≤ 10msec duty ≤ 1/10

\*T<sub>sol</sub> Conditions: 3mm from the base of the epoxy bulb

## ■ Typical Optical/ Electrical Characteristics (WHITE)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =200mA		12		V
Luminous Flux	Φ <sub>V</sub>	I <sub>F</sub> =200mA		70		lm
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =200mA				nm
Recommend Forward Current	I <sub>F</sub> (rec)	--	--	--	200	mA

## ■ Typical Optical/ Electrical Characteristics(RED)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =200mA		12		V
Luminous Flux	Φ <sub>V</sub>	I <sub>F</sub> =200mA		30		lm
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =200mA	636	639		nm
Recommend Forward Current	I <sub>F</sub> (rec)	--	--	--	200	mA



# Light-emitting diode



## ■ Typical Optical/ Electrical Characteristics(YELLOW)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F=200\text{mA}$		12		V
Luminous Flux	$\Phi_V$	$I_F=200\text{mA}$		45		lm
Peak Wavelength	$\lambda_P$	$I_F=200\text{mA}$	587		591	nm
Recommend Forward Current	$I_F(\text{rec})$	--	--	--	200	mA

## ■ Typical Optical/ Electrical Characteristics(PURE GREEN)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F=200\text{mA}$		12		V
Luminous Flux	$\Phi_V$	$I_F=200\text{mA}$		95		lm
Peak Wavelength	$\lambda_P$	$I_F=200\text{mA}$	515	525		nm
Recommend Forward Current	$I_F(\text{rec})$	--	--	--	200	mA

## ■ Typical Optical/ Electrical Characteristics(BLUE)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F=200\text{mA}$		12		V
Luminous Flux	$\Phi_V$	$I_F=200\text{mA}$		24		lm
Peak Wavelength	$\lambda_P$	$I_F=200\text{mA}$	473	476		nm
Recommend Forward Current	$I_F(\text{rec})$	--	--	--	200	mA

### Notes:

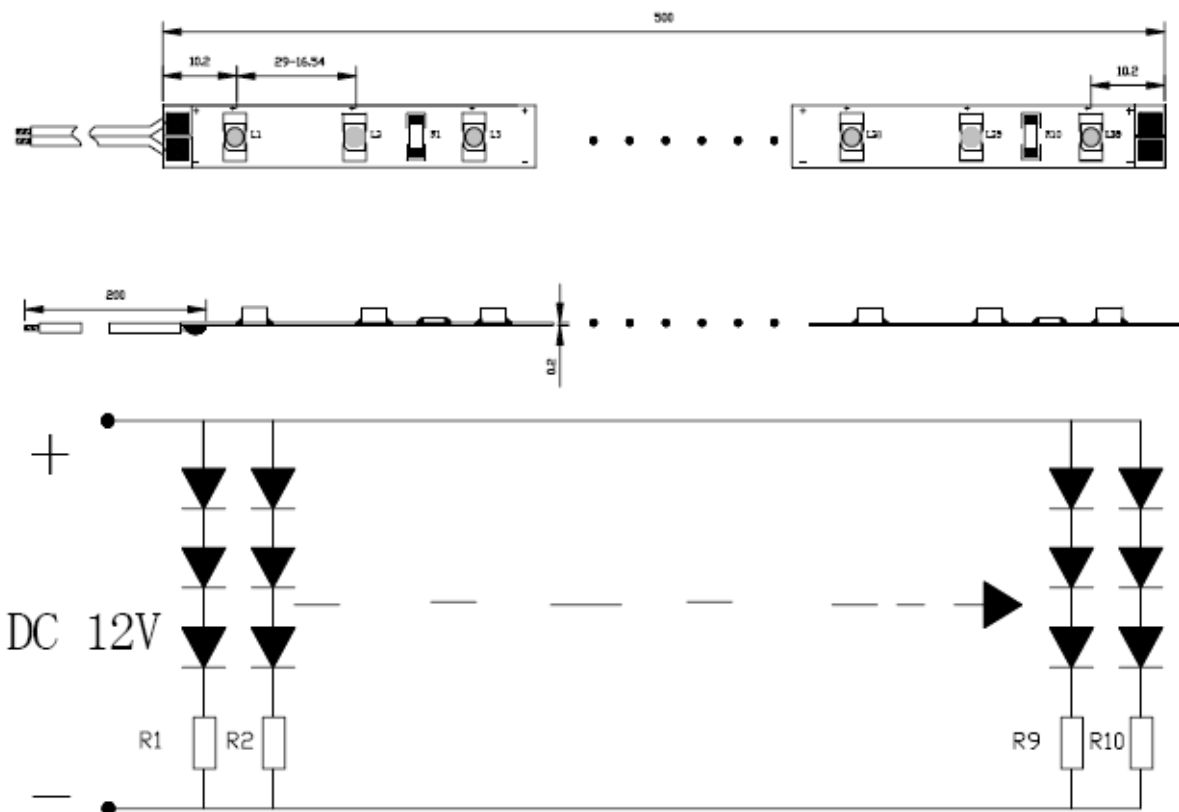
1. Absolute maximum ratings  $T_a=25^\circ\text{C}$ .
2. Tolerance of measurement of forward voltage  $\pm 0.1\text{V}$ .
3. Tolerance of measurement of peak Wavelength  $\pm 2.0\text{nm}$ .
4. Tolerance of measurement of luminous intensity  $\pm 15\%$ .



## Part Number: RL-LB1210 SERIES



### Package Dimensions



Chip		Lens Color
Material	Emitting Color	
InGaN	White	Water clear

### Notes:

1. All dimension units are millimeters.
2. All dimension tolerance is  $\pm 0.2\text{mm}$  unless otherwise noted.
3. An epoxy meniscus may extend about 1.5mm down the leads.  
Burr around bottom of epoxy may be 0.5mm max..