



LIGHT SOURCE

MODEL NO: EL-8309-12

Device Number: DOL-309-004

REV: 1.1

ECN: _____

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■Features

- Excellent electrical & optical characteristics
- Low power dissipation
- Good light uniformity
- High reliability & long life

■Descriptions

The product is assembled with lens and a row of AlGaAs/GaAs red LED mounted on PC board. The length of connector consisted of RED/BLACK(+/-) wires is 40 mm. The output of emitting light is a uniformity line light source.

The product gets excellent light output operated at 5V and suitable as a light source of Facsimile and Image scanner.

■Applications

- Facsimile
- Image scanner
- Bar code reader

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

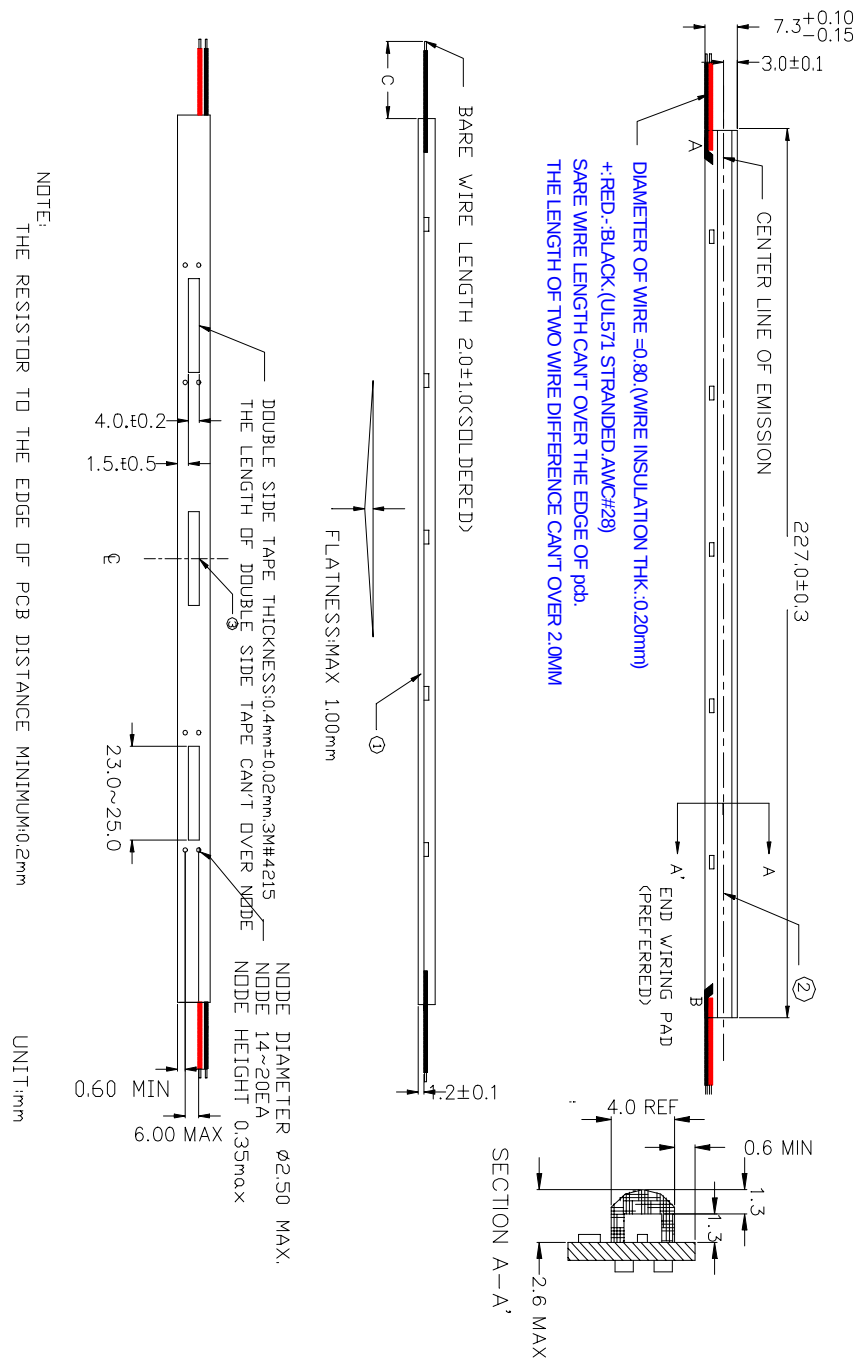


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■ Package Dimension:





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■ Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Units
Power dissipation	P _O	2.5	W
Forward current	I _F	170	mA
Reverse voltage	V _R	16	V
Operating temperature	T _{OPR}	0~+50	°C
Storage temperature	T _{STG}	-25~+75	°C

■ Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Units
Forward current	V _{DD}	V _{DD} =12V	--	--	170	mA
Reverse current	I _F	V _R =16V	--	--	100	μA
Illuminance	L _{up}	V _{DD} =12V	800	1200	1600	L _x
Effective light length	L	V _{DD} =12V	216	--	--	mm
Uniformity	U _P	V _{DD} =12V	--	--	15	%
Effective Illuminated	ΔL	V _{DD} =12V	--	4	--	mm
Peak emission wavelength	λ _P	V _{DD} =12V	--	570	--	nm
Spectral line half width	Δλ	V _{DD} =12V	--	30	--	nm



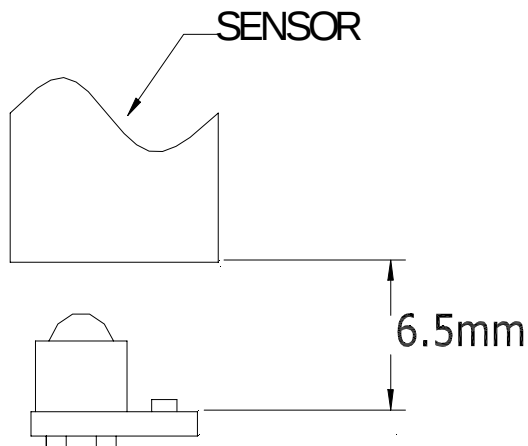
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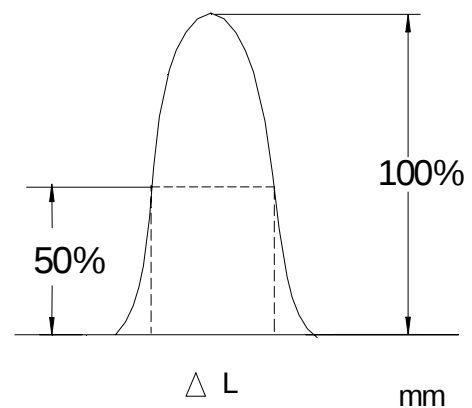
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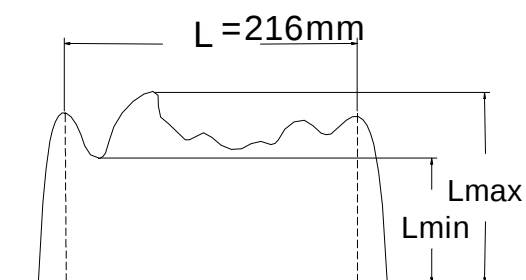
● **Attach height**



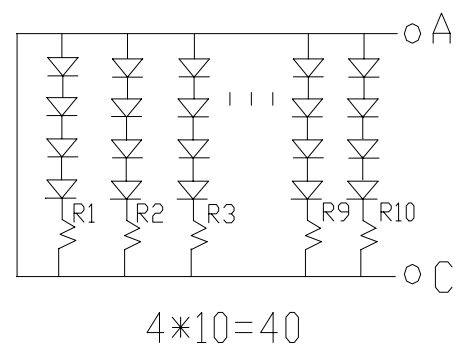
● **Effective illuminated half width**



● **Uniformity**



■ **Circuit diagram:**



$$up = \frac{L_{max} - L_{min}}{L_{max} + L_{min}} * 100\%$$