



YETDA INDUSTRY LTD.

Technical Data Sheet

MODEL NO : I150B4

1206 Package 3.2x1.6 mm Chip LEDs

Features :

- Package in 8mm tape on 7" diameter reel
- Compatible with automatic placement equipment
- Compatible with reflow solder process

Applications :

- Indicators
- Automotive : backlighting in dashboard and switch
- Backlight for LCD

Dice material	Resin (mold)	Lens Color
AlGaAs/GaAs	Epoxy	Water transparent

Electrical/Optical Characteristics(Ta=25°C)

Parameter	Symbol	Condition	Min	Typ.	Max	Unit
Radiant incidence	I _e	IF=20mA	0.10	0.95	2.10	mW/Sr
Spectral bandwidth	$\Delta \lambda$	IF=20mA		70		nm
Peak Emission Wavelength	λ_p	IF=20mA	870	880	890	nm
Viewing Angle	2 Θ 1/2	If=10mA		140		Deg
Forward Voltage	V _F	IF=20mA	1.0	1.4	1.8	V
Reverse Current	I _R	VR=5V			10	μ A

Absolute Maximum Ratings(Ta=25°C)

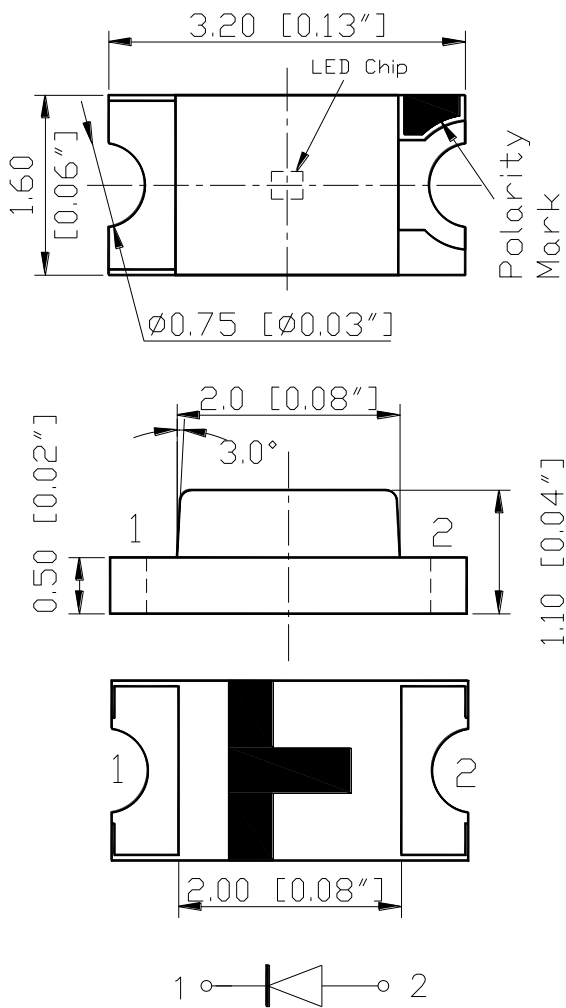
Parameter	Symbol	Maximum	Unit
Power Dissipation	P _d	90	mW
Peak Forward Current Pulse width 100 μ s, duty cycle =1%	IF(Peak)	1	A
Continuous Forward Current	IF	50	mA
Reverse Voltage	VR	5	V
Operating Temperature Range	Topr	-40 to +80	°C
Storage Temperature Range	Tstg	-40 to +80	°C

20/10/15D

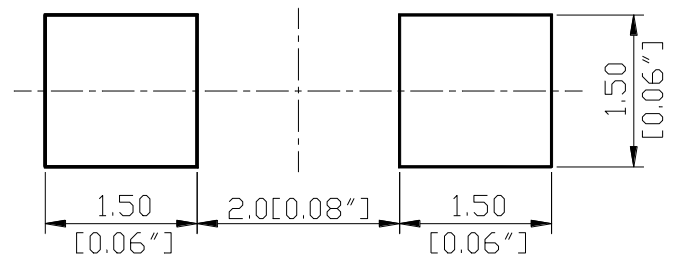


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Package



RECOMMEND PAD LAYOUT

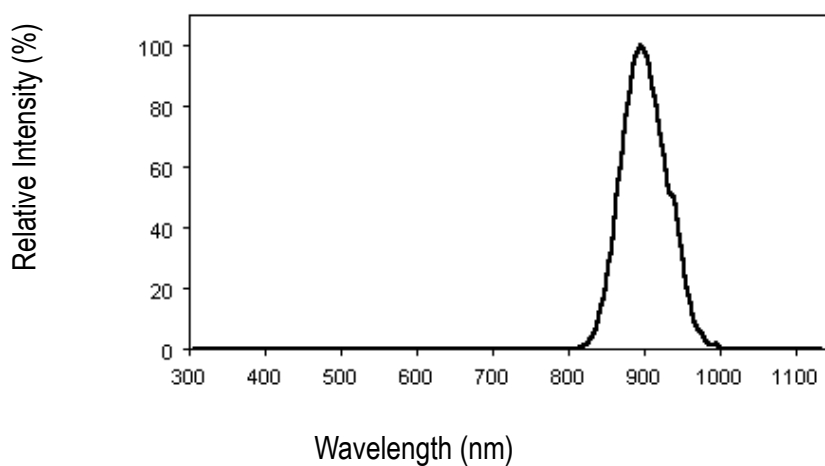


ITEM	MATERIALS
Resin (mold)	Epoxy
Lens color	Water transparent
Dice	GaAIAs/GaAs

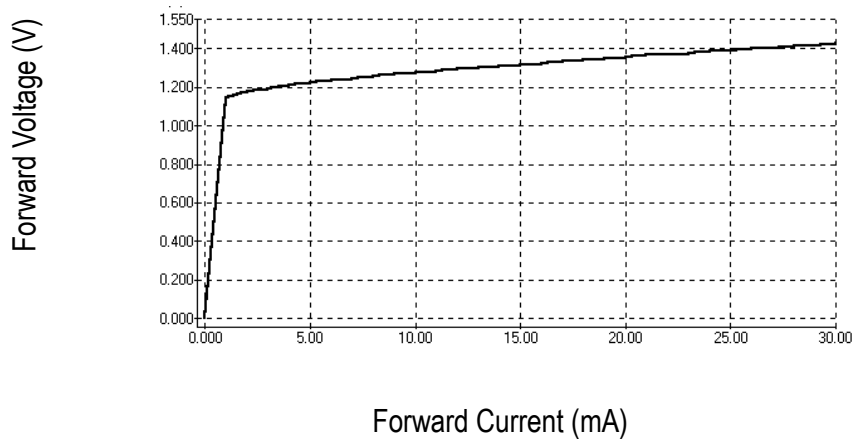


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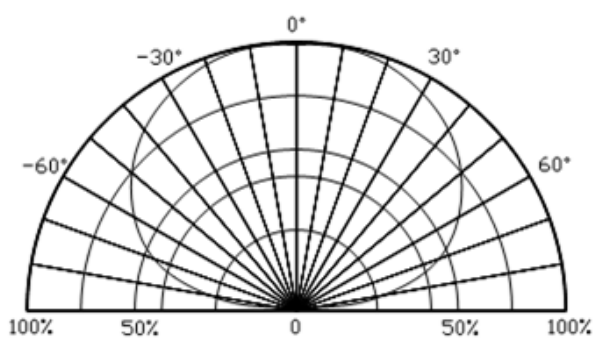
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage



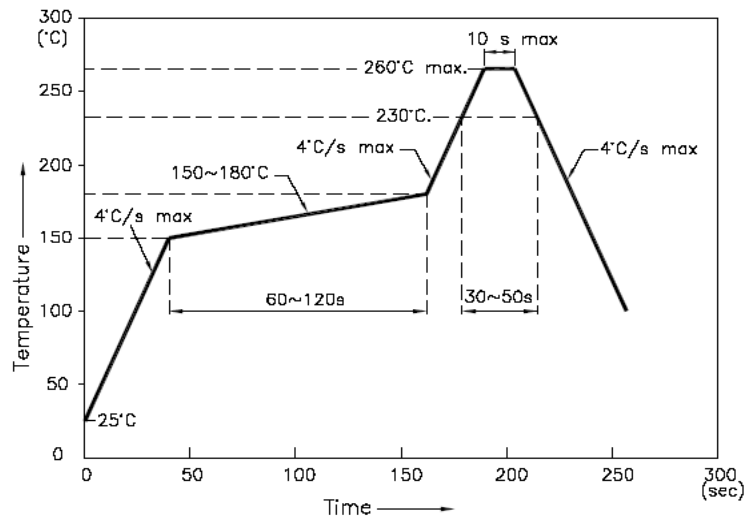
Directive Characteristics





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■ Reflow Temp/Time



NOTES:

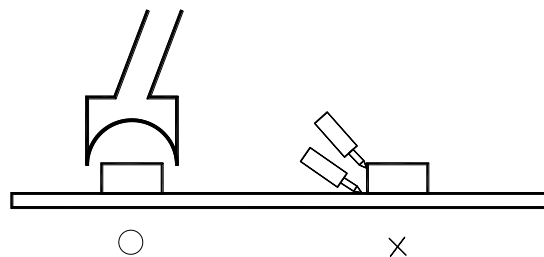
1. We recommend the reflow temperature $245^{\circ}\text{C} (\pm 5^{\circ}\text{C})$. the maximum soldering temperature should be limited to 260°C .
2. dont cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

■ Soldering iron

Basic spec is $\leq 5\text{sec}$ when 260°C . If temperature is higher, time should be shorter ($+10^{\circ}\text{C} \rightarrow -1\text{sec}$). Power dissipation of iron should be smaller than 20W, and temperatures should be controllable. Surface temperature of the device should be under 230°C .

■ Rework

1. Customer must finish rework within 5 sec under 260°C .
2. The head of iron can not touch copper foil
3. Twin-head type is preferred.



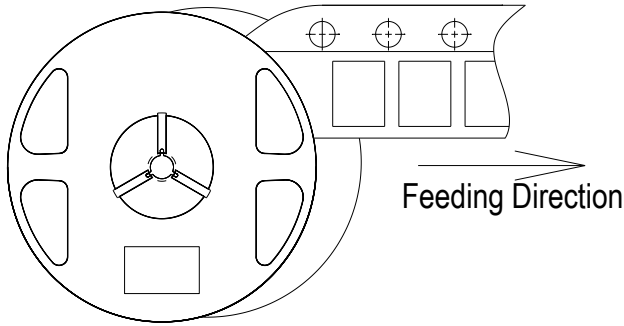
■ Avoid rubbing or scraping the resin by any object, during high temperature, for example reflow 、 solder etc.



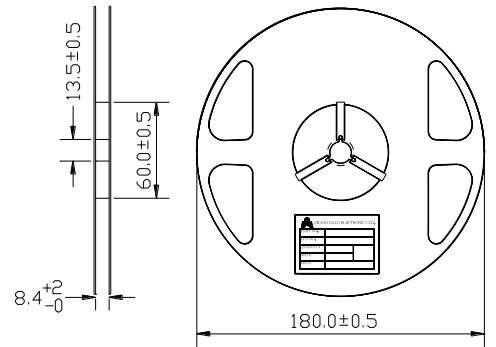
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Packaging Specifications

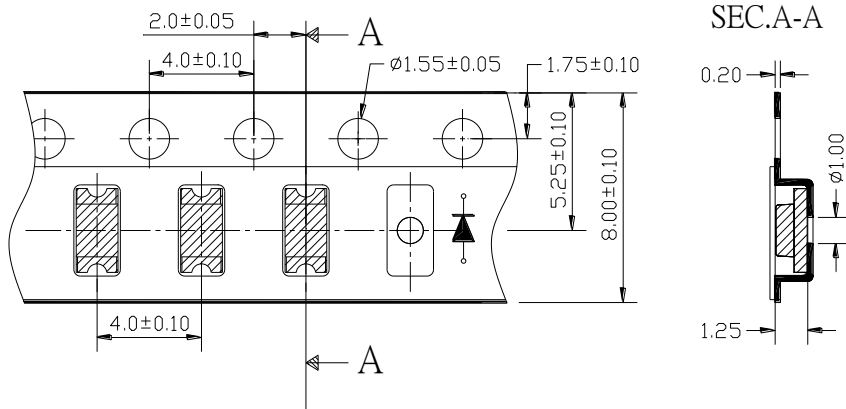
- Feeding Direction



- Dimensions of Reel (Unit: mm)



- Dimensions of Tape (Unit: mm)



- Arrangement of Tape

