



YETDA INDUSTRY LTD.

Technical Data Sheet

MODEL NO : Q150OVS4

1206 Package 3.2*1.6mm 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	Emitted color	Lens Color
AlGaInP	Red	Water Clear

Electrical/Optical Characteristics(Ta=25 °C)

Parameter	Symbol	Condition	Min	Typ.	Max	Unit
Luminous Intensity	I _V	IF=20mA	80	150		mcd
Dominant Wavelength	λ	IF=20mA		625		nm
Peak Emission Wavelength	λ _p	IF=20mA		632		nm
Viewing Angle	2θ _{1/2}	IF=20mA		130		Deg
Forward Voltage	V _F	IF=20mA		2.0	2.4	V
Reverse Current	I _R	VR=5V			10	μA

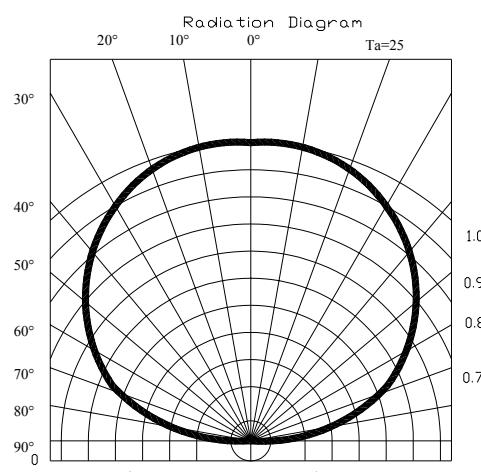
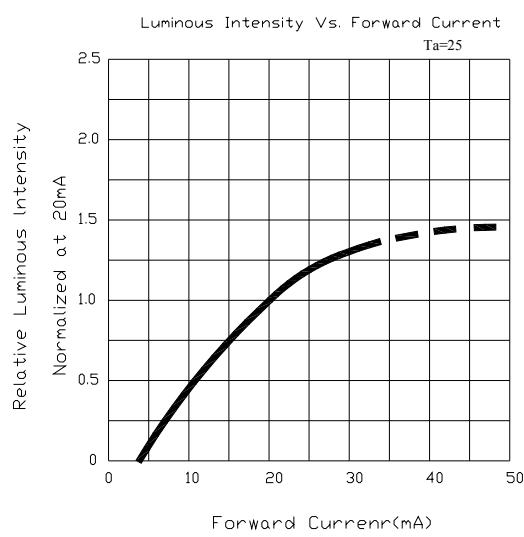
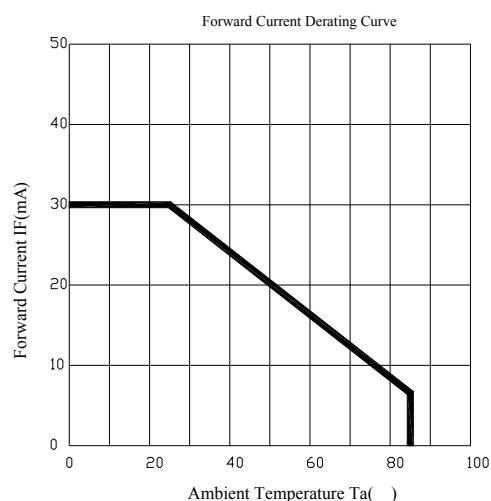
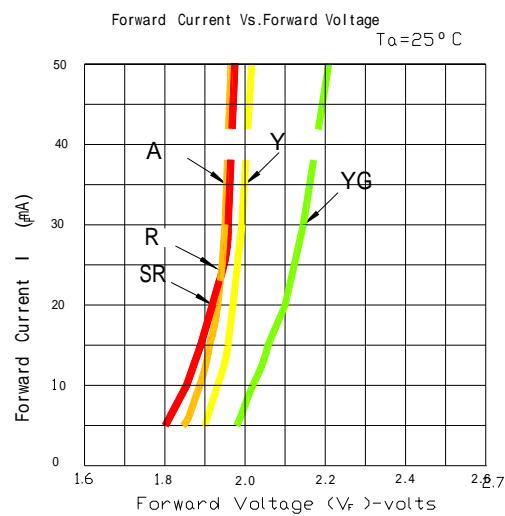
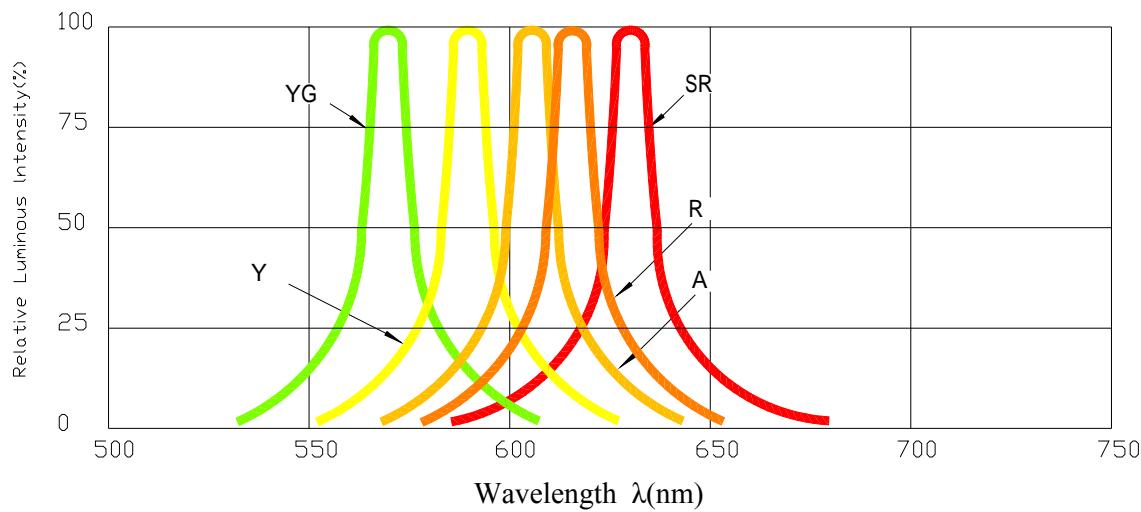
Absolute Maximum Ratings(Ta=25 °C)

Parameter	Symbol	Maximum	Unit
Power Dissipation	P _d	78	mW
Peak Forward Current(1/10 Duty Cycle 0.1ms Pulse Width)	IF(Peak)	100	mA
Continuous Forward Current	IF	30	mA
Reverse Voltage	V _R	5	V
Derating Linear From 25		0.3	mA/
Operating Temperature Range	T _{opr}	-30 to +80	
Storage Temperature Range	T _{stg}	-40 to +90	

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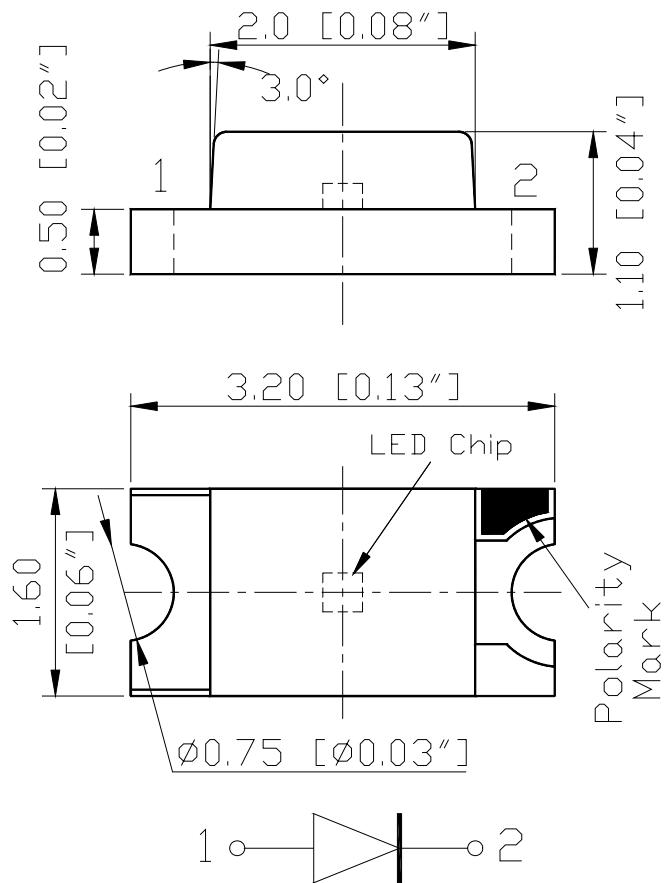


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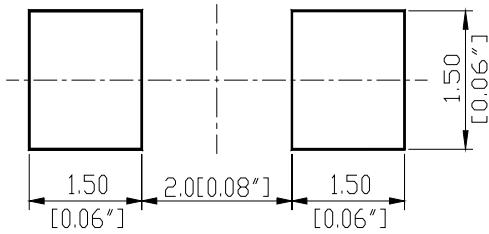




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RECOMMEND PAD LAYOUT





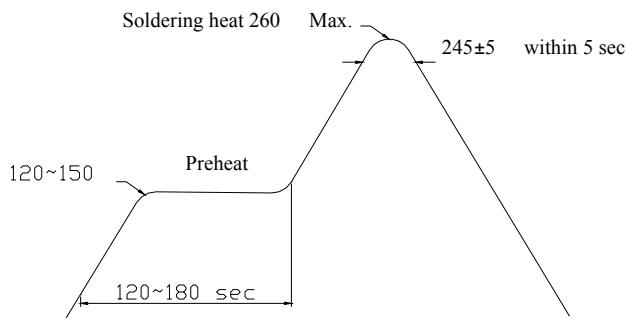
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Descriptions :

- The Chip-LED Taping is much smaller than lead frame type components, thus enable smaller board size, higher packing density, reduced storage space and finally smaller equipment to be obtained.
- Besides, lightweight makes them ideal for miniature application, etc.

Soldering heat reliability (DIP):

Please refer to the following figure :



Precautions For Use :

- Over – current – proof

Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen)

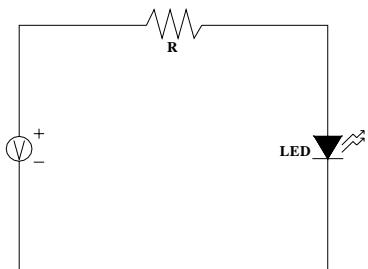
- Storage

1. The operation of temperature and R.H. are : 5 30 , 60%R.H. Max..
2. Once the package is opened, the products should be used within a week. Otherwise, they should be kept in a damp-proof box with desiccating agent. Considering the tape life, we suggest our customers to use our products within 1.5 year (from production date).
3. It's recommended to bake before soldering when the package is unsealed after 72 hrs. The condition is : 60 ±5 for 15hrs.

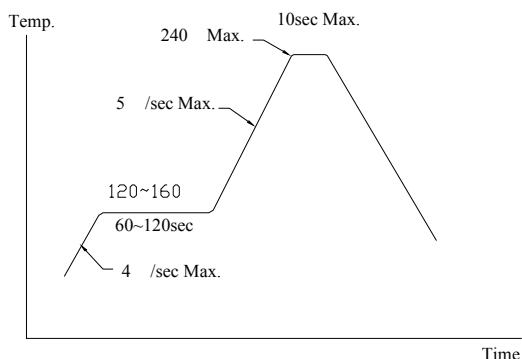


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Test Circuit



Reflow Temp. / Time :



Reliability Test Items And Conditions

The reliability of products shall be satisfied with items listed below.

No.	Items	Test Condition	Test Hours/Cycles	Sample Size
1	Solder Heat	TEMP : 260 ±5	5 sec	48 pcs
2	Temperature Cycle	90 ~ 25 ~ -30 ~ 25 30m 5m 30m 5m	300Cycles	48 Pcs
3	Thermal Shock	100 ~ -55 10m 10m	100Cycles	48 Pcs
4	Operation Life	If=20mA	1000 Hrs	48 Pcs
5	High Temperature Storage	Temp:90	1000Hrs	48 Pcs
6	Low Temperature Storage	Temp:-30	1000Hrs	48 Pcs
7	High Temperature/High Humidity	80 / R.H80%	1000Hrs	48 Pcs



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