

Technical Data Sheet

MODEL NO: Q350YG4-R-EKL

3.2x1.6x1.1mm with Inner Lens Reverse Mounted SMD

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	Green	Water clear

Electrical/Optical Characteristics(Ta=25 $^{\circ}$ C)

Parameter	Test	Symbol	Value			Unit
	Condition		Min	Тур	Max	Ullit
Dominant wavelength	IF=20mA	λd	566		576	nm
Spectral half bandwidth	IF=20mA	Δλ		16		nm
Forward voltage	IF=20mA	VF	1.8		2.2	V
Luminous intensity	IF=20mA	lv	50	150		mcd
Viewing angle at 50% lv	IF=10mA	2 0 1/2		35		Deg
Reverse current	V _R =5V	lr			10	μА

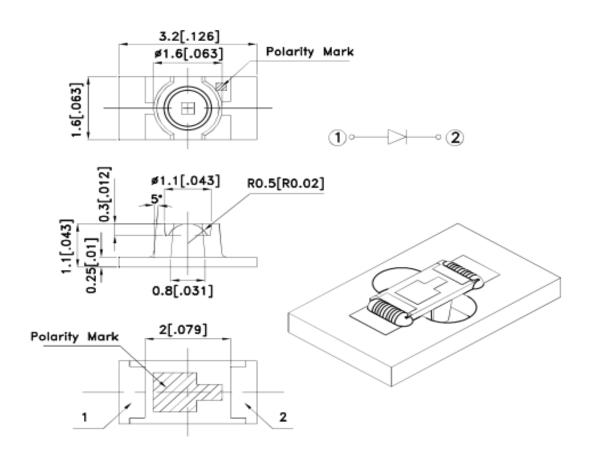
Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Value	Unit
Power dissipation	Pd	75	mW
Forward current	lF	25	mA
Reverse voltage	VR	5	V
Operating temperature range	Тор	-40 ~+80	$^{\circ}\!\mathbb{C}$
Storage temperature range	Tstg	-40 ~+85	$^{\circ}\!\mathbb{C}$
Peak pulsing current (1/8 duty f=1kHz)	IFP	80	mA

17JUN15Y



PACKAGING DIMENSIONS (mm):





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° C \sim 30 $^{\circ}$ C, 60 $^{\circ}$ R.H. Max.
- 2. Once the package is opened, the products should be used within a week. Otherwise, they should be kept in a dampproof box with desiccating regent. 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 : $60^{\circ}\text{C}\pm5^{\circ}\text{C}$ for 15hrs.



■ Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

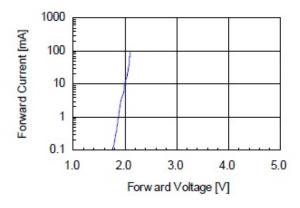


Fig 2. Relative Intensity vs. Forward Current

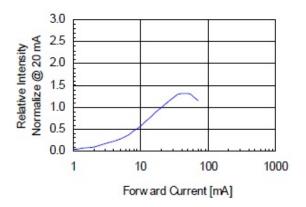


Fig 3. Forward Voltage vs. Temperature

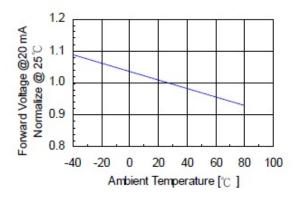


Fig 4. Relative Intensity vs. Temperature

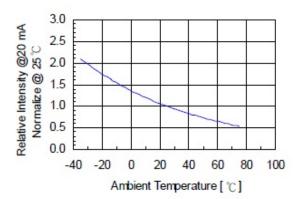
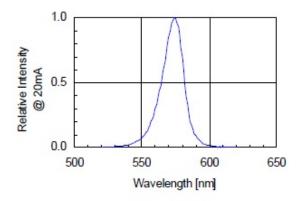
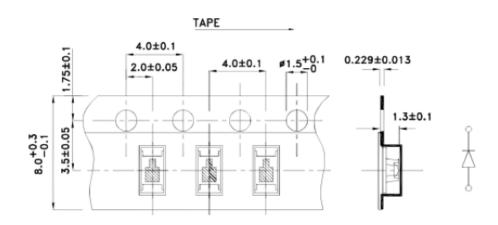


Fig 5. Relative Intensity vs. Wavelength

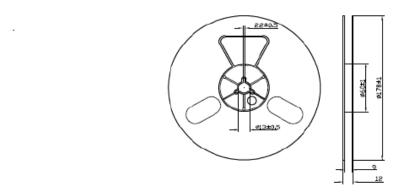




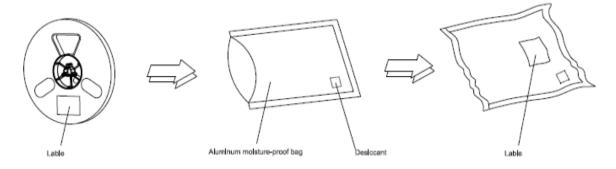
Packaging Specifications



Reel Dimensions

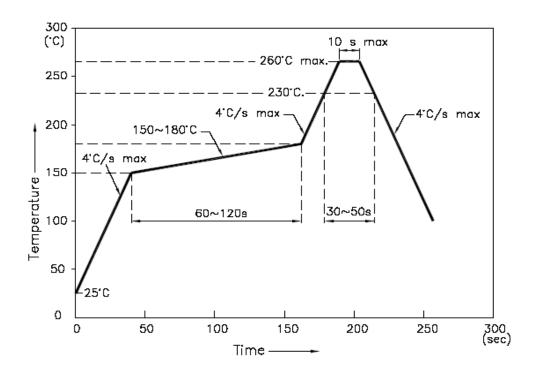


Moisture Resistant Packaging





■ Reflow Temp/Time



NOTES:

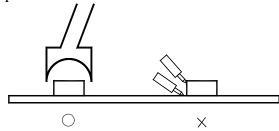
- 1. We recommend the reflow temperature $245^{\circ}\text{C}(\pm 5^{\circ}\text{C})$.the maximum soldering temperature should be limited to 260°C .
- 2. dont cause stress to the epoxy resin while it is exposed to high temperature.
- 3. Number of reflow process shall be 2 times or less.

■Soldering iron

Basic spec is \leq 5sec when 260°C. If temperature is higher, time should be shorter (+10°C \rightarrow -1sec). 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.