

Technical Data Sheet

MODEL NO: Q3535R4P-PL 3.5 x 3.5 x2mm Red SMD

Features:

- ●3.5 X 3.5mm
- ●2000 pcs Per Reel
- Compatible with automatic placement equipment
- Compatible with reflow solder process

Applications:

- Indicators
- Automotive: backlighting in dashboard and switch

Dice material	Emitted color	Lens Color
AlGaInP	Red	Water Clear

Electrical/Optical Characteristics(Ta=25°C)

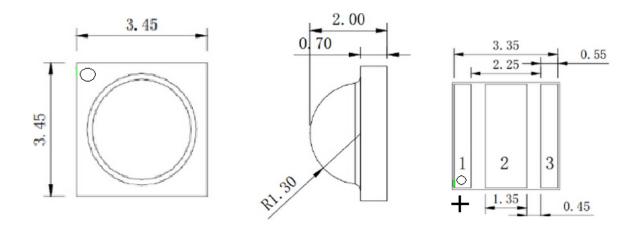
Parameter	Test	Symbol	Value			Unit
	Condition		Min	Тур	Max	Unit
Dominant wavelength	IF=700mA	λD	620		630	nm
Forward voltage	IF=700mA	VF	2.0		2.4	V
Luminous Flux	IF=700mA		80		90	lm
Viewing angle at 50% lv	IF=10mA	2 <i>0</i> 1/2	120		140	Deg
Reverse current	V _R =5V	lr			30	μА

Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Value	Unit
Power dissipation	Pd	3	W
Forward current	lF	700	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 (Duty 1/10@1KHZ)[1]	lfp	1000	mA



PACKAGING DIMENSIONS (mm):



- 1. All dimension units are millimeters.
- 2. All dimension tolerance is ±0.2mm unless otherwise noted.

Precautions For Use:

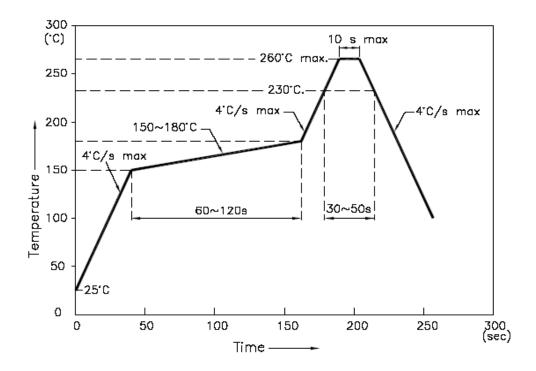
Over - current - proof

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%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.

■ 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 $260\,^{\circ}\text{C}$.
- 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.

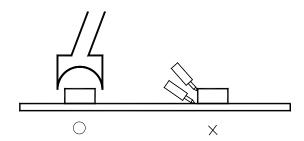


■Soldering iron

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.