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Technical Data Sheet

MODEL NO： Q776Y4P-PLK **2.8 x 3.5 x 0.8mm Yellow SMD**

Features：

●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	Yellow	Water Clear

Electrical/Optical Characteristics(Ta=25℃)

Parameter	Test Condition	Symbol	Value			Unit
			Min	Typ	Max	
Dominant wavelength	I_F=150mA	λ_D	590	592.5	595	nm
Forward voltage	I_F=150mA	V_F	2.0		2.4	V
Luminous Intensity	I_F=150mA	Iv		3000		mcd
Luminous Flux	I_F=150mA	ϕ		6.5	7	lm
Viewing angle at 50% Iv	I_F=10mA	2θ 1/2		120		Deg
Reverse current	V_R=5V	I_R			10	μA

Absolute Maximum Ratings(Ta=25℃)

Parameter	Symbol	Value	Unit
Power dissipation	Pd	500	mW
Forward current	I_F	150	mA
Reverse voltage	V_R	5	V
Operating temperature range	Top	-20 ~+80	℃
Storage temperature range	Tstg	-40 ~+80	℃
Peak pulsing current (Duty 1/10@1KHZ)[1]	I_{FP}	150	mA

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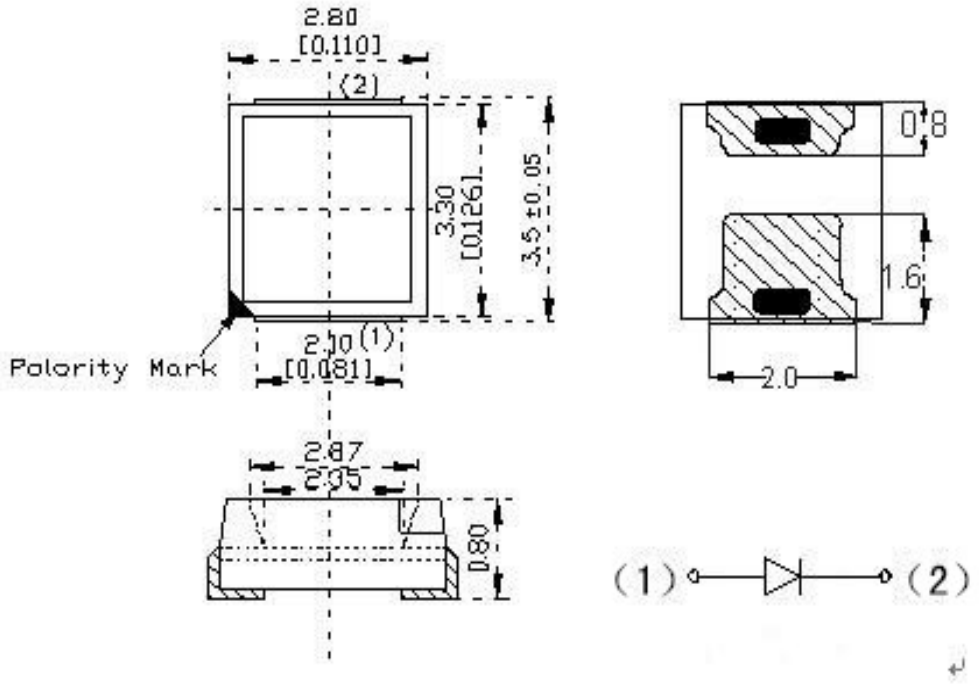
PACKAGING DIMENSIONS (mm):



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

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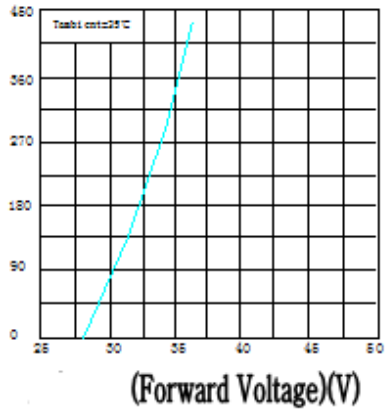
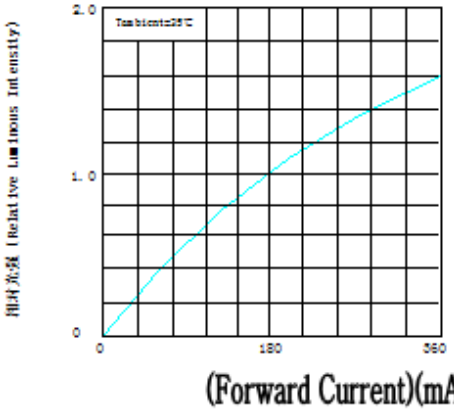
(Optical-Electrical Characteristic)

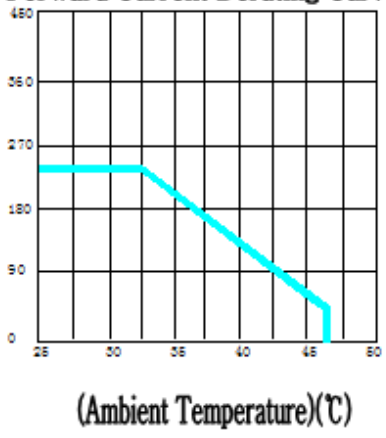
Volt-Ampere Characienistics



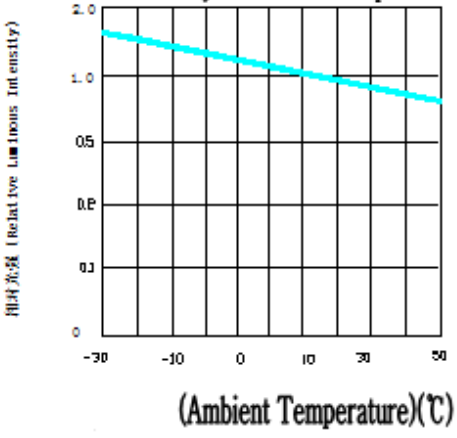
Relative Luminous Intensity VS Forward Current



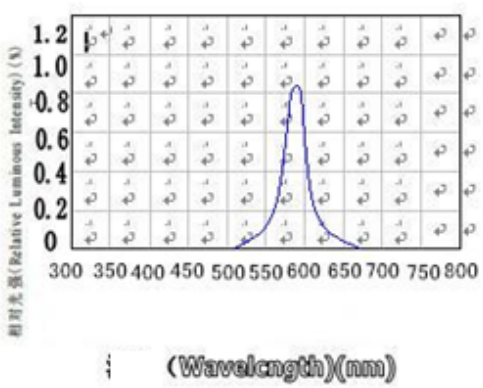
Forward Current Derating Curve



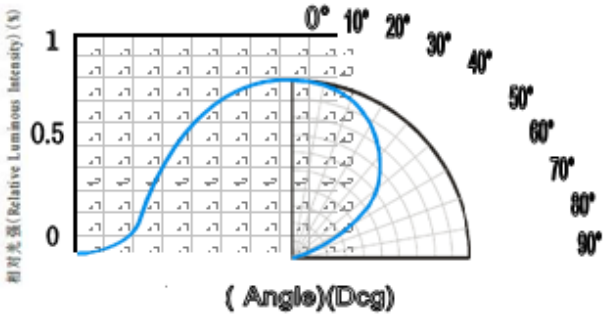
Luminous Intensity VS Ambient Temperature



Relative Spectral Distribution



Typical Spectral Distribution



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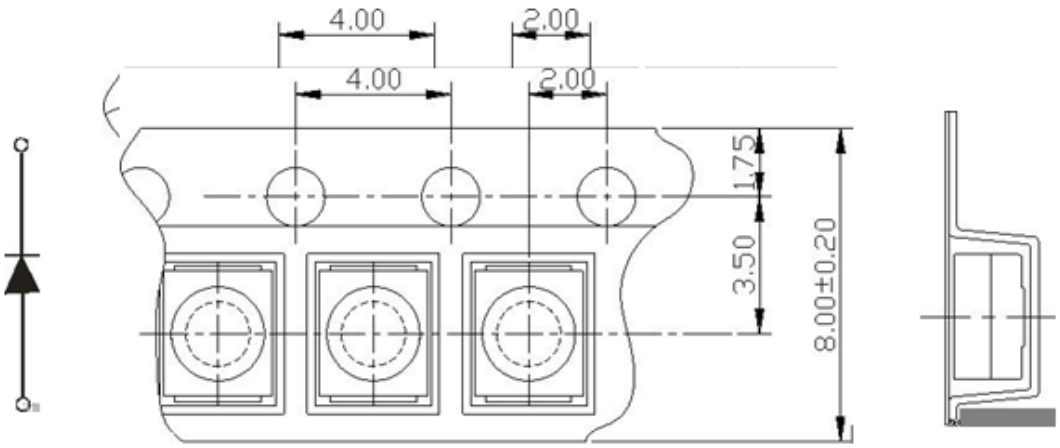
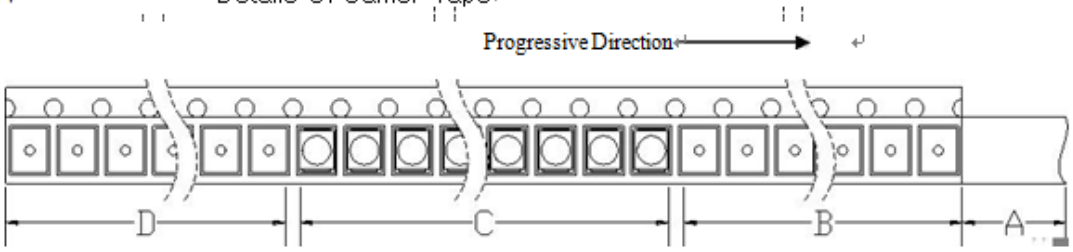
Carrier Tape



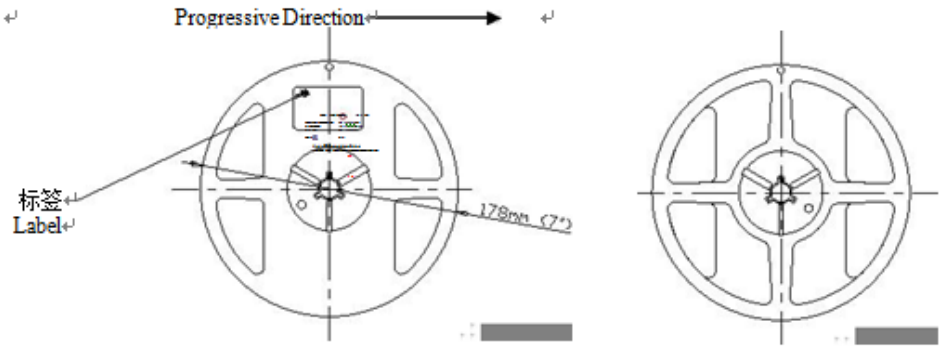
All dimensions in mm, tolerances unless mentioned is ±0.1 mm.

✧ Details Of Carrier Tape



A: Top Cover Tape, 300mm; B: Leader, Empty, 200mm; C: 4000 Lamps Loaded; D: Trailer, Empty, 200mm.

✧ Reel Dimension



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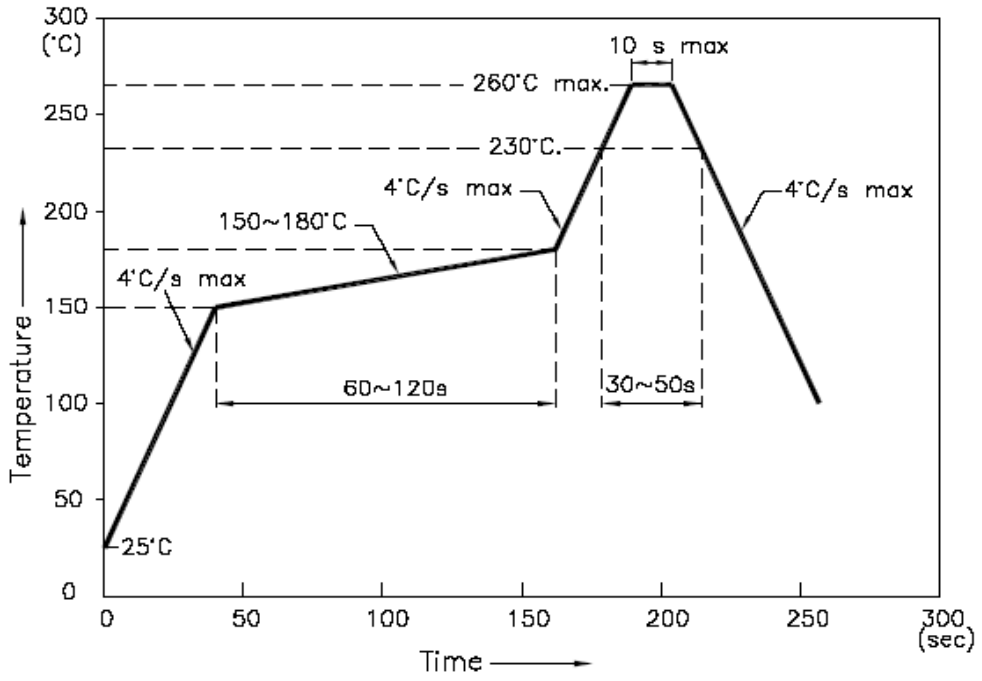
Precautions For Use：
Over－current－proof
Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change （Burn out will happen）
Storage
1. The operation of temperature and R.H. are：5℃～30℃, 60％R.H. Max.
2. Once the package is opened, the products should be used within a week. Otherwise, they should be kept in a 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℃±5℃ for 15hrs.

■ Reflow Temp/Time



NOTES:

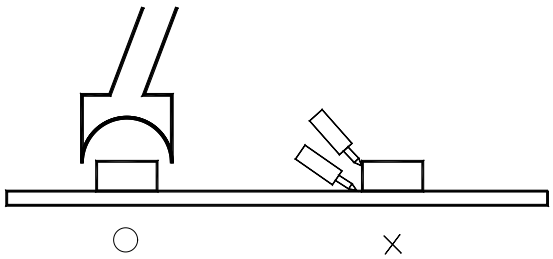
1. We recommend the reflow temperature 245℃(±5℃).the maximum soldering temperature should be limited to 260℃.
2. dont cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

■Soldering iron

Basic spec is ≤ 5sec when 260℃. If temperature is higher, time should be shorter (+10℃→ -1sec).Power dissipation of iron should be smaller than 20W, and temperatures should be controllable .Surface temperature of the device should be under 230℃ .

■Rework

1. Customer must finish rework within 5 sec under 260℃.
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.**