

# Technical Data Sheet

MODEL NO: I3535A4P-M 3535 Package 3.45\*3.45mm Chip LEDs

### Features:

• Package in 8mm tape on 7" diameter reel

• Compatible with automatic placement equipment

• Compatible with reflow solder process

### Applications:

Lighting

• Automotive: backlighting in dashboard and switch

Backlight for LCD

Dice material	Emitted color	Lens Color
GaAIAs	Infrared	Water Clear

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

Parameter	Test	Symbol	Value			Unit
	Condition	,	Min Typ Max	Max		
Forward voltage	IF=350mA	VF		1.5	2.0	V
Wavelength	IF=350mA	Wld		850		nm
Total Radiated Power	IF=350mA	PD		300		mW
Viewing angle at 50% lv	IF=350mA	2 <i>\theta</i> 1/2		120		Deg
Reverse current	Vr=5V	lr		-	10	μΑ

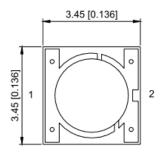
### Absolute Maximum Ratings(Ta=25℃)

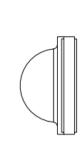
Parameter	Symbol	Value White	Unit
Power dissipation	Pd	2	W
DC Forward current	lF	1	Α
Reverse voltage	VR	5	V
Operating temperature range	Topr	-40 ~+85	$^{\circ}\!\mathbb{C}$
Storage temperature range	Tstg	-40 ~+100	$^{\circ}\!\mathbb{C}$
Peak puls ng current (1/8 duty f=1kHz)	<b>I</b> FP	1500	mA

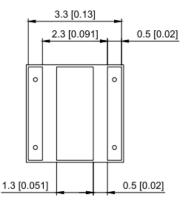
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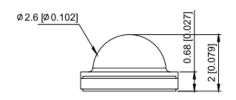


### PACKAGING DIMENSIONS



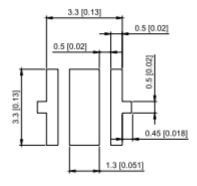




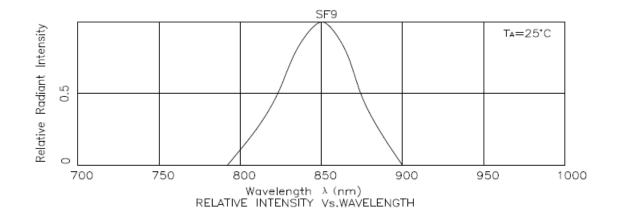


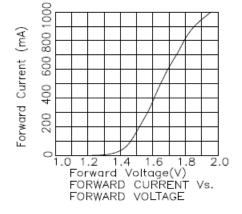


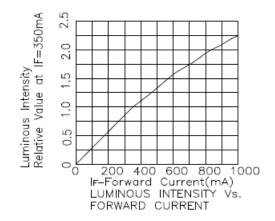
# Recommended soldering pattern

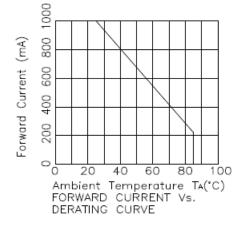


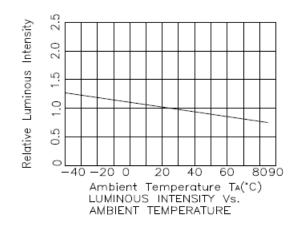


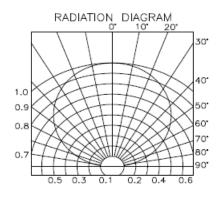














### **Precautions For Use:**

### Over - current - proof

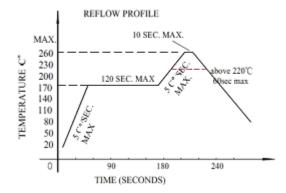
Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen)

### Storage

- 1. The operation of temperature and R.H. are :  $5^{\circ}$ 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

Temperature-profile (Surface of circuit board) Use the following conditions shown in the figure.



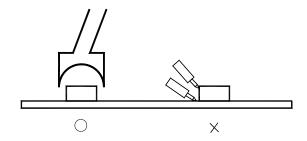
#### NOTES:

- 1. We recommend the reflow temperature  $245^{\circ}\mathbb{C}(\pm 5^{\circ}\mathbb{C})$ .the maximum soldering temperature should be limited to  $260^{\circ}\mathbb{C}$ .
- 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.





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

### **Dimensions of Tape (Unit: mm)**

