

Technical Data Sheet

MODEL NO: 195UR/ANW4

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	
		Yellow
InGaN/GaN	White	

Electrical/Optical Characteristics(Ta=25°C)

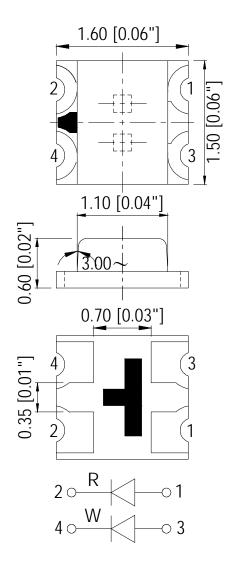
Parameter	Test	Symbol		Value			Unit
	Condition			Min	Тур	Max	Unit
Spectral half bandwidth	IF=20mA	Δλ	R		630		nm
			W	X:0.234		X:0.2855	
				Y:0.2123		Y:0.2974	
Dominant wavelength	IF=20mA	λD	R	620		630	- nm
			W	/	/	/	
Forward voltage	I _F =20mA	VF	R	1.8		2.4	V
			W	2.8		3.7	
Luminous intensity	I _F =20mA	lv	R	60	90		mcd
			W	400	600		
Viewing angle at 50% Iv	IF=10mA	2 <i>0</i> 1/2	R	140			Dan
			W			Deg	
Reverse current	V _R =5V	lr	R		10		
			W	10		μА	

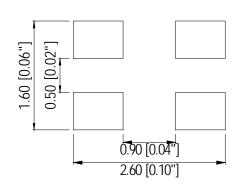


Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Value	Unit
Power dissipation	Pd	72	mW
Forward current	lF	30	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	125	mA

PACKAGING DIMENSIONS (mm):





Precautions For Use:

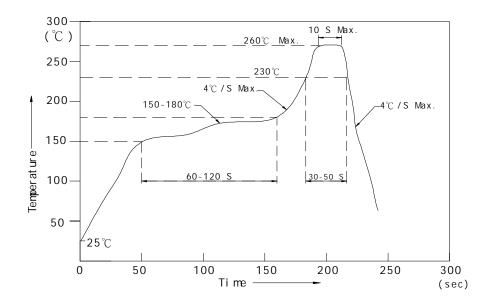
Over- current- proof

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 $: 5^{\circ}\text{C} \sim 30^{\circ}\text{C}$, 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 : $60^{\circ}\text{C} \pm 5^{\circ}\text{C}$ 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.

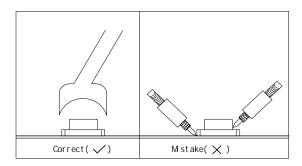


■Soldering iron

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.