Right Angle, Red / Green



RoHS Compliant

Features

- Wide viewing angle 120°
- Reflow Solderable
- · High Luminous Intensity and Low Power Dissipation
- · Good Reliability and Long Life
- · Lead Free

Applications

- · Optical indicator
- · Indoor display
- · Backlighting in dashboard and switch
- · Flat backlighting for LCD, symbol and display
- General use

Selection Guide

Part Number	Dice	Lens Type	Luminou	Viewing Angle		
			Min	Тур	Max	201/2
MP008274	R - AlGalnP	Water Clear	70	-	200	120
	G - AlGalnP		20	-	70	120

Note:

- 1. 201/2 is the angle from optical centerline where the luminous intensity is 201/2 the optical centerline value.
- 2. The above luminous intensity measurement allowance tolerance ±10%

Electrical and Optical Characteristics at Ta=25°C

Parameter	Device	Min.	Тур	Max	Units	Test conditions
Forward voltage	R	1.8	-	2.4	V	IF=20mA
Forward voltage	G	1.8	-	2.4		
Reverse Current	IR	-	-	10	uA	VR=5V
Dominant wavelength	R	618	-	627	nm	IF=20mA
Dominant wavelength	V	566	-	575	nm	

Note:

- 1. The above forward voltage measurement allowance tolerance ±0.1V.
- 2. The tolerance of wave length: ±1nm.

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Units	
Dower Dissipation	R	48	mW	
Power Dissipation	V	40		
DC Forward Current	IF	20	mA	
Pook Forward Current [1]	R	75	m Λ	
Peak Forward Current [1]	V	75	mA	
Reverse Voltage	VR	5	V	
Electrostatic Discharge (HBM)	ESD	2000	V	
Operating Temperature	Topr	-40 to +85	°C	
Storage Temperature	Tstg	-40 to +100	°C	

Notes

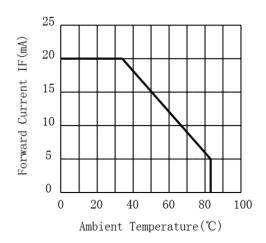
1. 1/10 Duty cycle,0.1ms pulse width

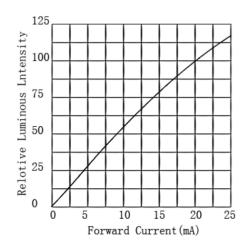


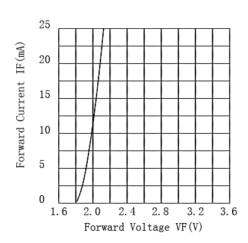
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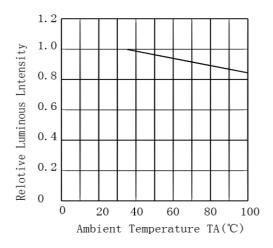


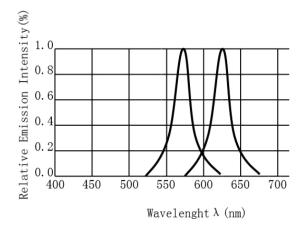
Typical optical characteristics curves

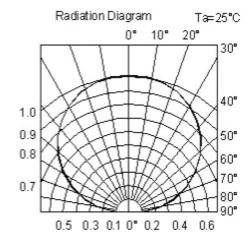










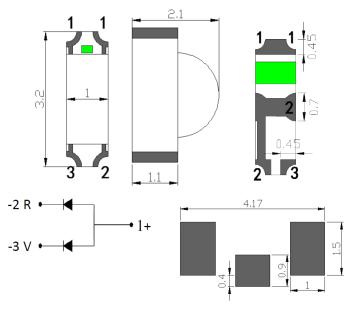




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Dimensions



Notes Dimensions : Millimetres

- 1. All dimension tolerance is ±0.2mm unless otherwise noted
- 2. All PCB and markings are subject to change without prior notice

SMT Reflow Soldering Instructions

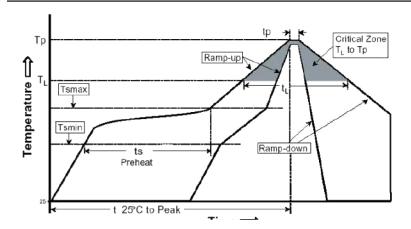
- 1. High temperature welding recommended no more than 2 times
- 2. When soldering, do not put stress on the LEDs during heating
- 3. Reflow temperature distribution (Acc.to J-STD-020D)

Profile feature	Sn-Pb Eutect	tic Assembly	Pb-Free Assembly		
Profile leature	Large body	Small body	Large body	Small body	
Average ramp-up rate (TL to Tp)		3°C / sec	ond max.	nd max.	
Preheat -Temperature Min (TSmin) -Temperature Max (TSmax) -Time (min to max) (ts)	100°C 150°C 60 to 120 seconds		150°C 200°C 60 to 180 seconds		
Tsmax to TL -Ramp-up Rate			3°C / sec	cond max.	
Time maintained above -Temperature (TL) -Time (tL)	183°C 60 to 150 seconds		217°C 60 to 150 seconds		
Peak Temperature (Tp)	225 +0/-5°C	240 +0/-5°C	245 +0/-5°C	260 +0/-5°C	
Time within 5°C of actual Peak Temperature (tp)	10 to 30 seconds		10 to 30 seconds	20 to 40 seconds	
Ramp-down Rate	6°C / second max.				
Time 25°C to Peak Temperature	6 minutes max.		8 minutes max.		



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Soldering iron

- 1. When hand soldering, the temperature of the iron must be less than 350°C for 3 seconds
- 2. The hand solder should be done only once

Part Number Table

Description	Part Number
Chip LED, Red/Geen, 627/575nm, 120°, 200/70mcd, Surface Mount	MP008283

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