

OSI3CA5111A

•Outline Dimension

1:Anode

2:Cathode

Unit:mm Tolerance:<u>+</u>0.20mm

unless otherwise noted

5.0

8.7

SMA3

0.5<u>+</u>0.

2.54

26.0MIN

- Features
- High Radiant Power LEDs
- 5mm Standard Directivity
- UV Resistant Epoxy
- Water Clear Type

Applications

- IrDA
- Encoder
- Data Communication
- IR camera

Absolute Maximum Rating

Item	Symbol	Value	Unit				
DC Forward Current	$\mathbf{I}_{\mathbf{F}}$	70	mA				
Pulse Forward Current*	\mathbf{I}_{FP}	700	mA				
Reverse Voltage	VR	5	V				
Power Dissipation	PD	126	mW				
Operating Temperature	Topr	-30 ~ +85	°C				
Storage Temperature	Tstg	-40~ +100	°C				
Lead Soldering Temperature	Tsol	260°C/5sec	-				

Directivity

C

SMIN



*Pulse width Max.10ms Duty ratio max 1/10

Electrical -Optical Characteristics

(Ta=25℃)

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Item	Symbol	Condition	Min.	Тур.	Max.	Unit	
DC Forward Voltage	V_{F}	IF=50mA	-	1.6	1.8	V	
DC Reverse Current	IR	V _R =5V	-	-	10	μA	
Peak Wavelength	λ_{p}	IF=50mA	-	850	-	nm	
Radiant Intensity	Ie	IF=50mA	150	220	330	mW/Sr	
Radiant Power	Ро	IF=50mA	15	30	45	mW	
50% Power Angle	201/2	IF=50mA	-	15	-	deg	
* T-learner of measurements of Deale measurements is 1 and							

*1 Tolerance of measurements of Peak wavelength is ± 1 nm *2 Tolerance of measurements of Radiant Power is $\pm 15\%$

*3 Tolerance of measurements of forward voltage is ± 0.1 V

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LAMP APPLICATION (PB FREE SOLDERJING)

Apply to LAMP (DIP) SERIES.

Description:

- (1) Manual soldering (Solder Iron)
 - (1.1) Temperature at tip of the iron:350 $^\circ\!\mathrm{C}$ Max.
 - (1.2) It's banned to load any stress on the resin during soldering.
 - (1.3) Soldering time: 3sec.Max.(one time only.)
 - (1.4) Leave 3mm of minimum distance from the base of the epoxy.
- (2) Dip Soldering (Wave Soldering-Solder Bath)
 - (2.1) Leave 3mm of minimum distance from the base of the epoxy. Soldering beyond the base of the tie bar (stand off) is recommended.
 - (2.2) When soldering, do not put stress on the LEDs during heating.
 - (2.3) Cutting the lead frames at high temperatures may cause LED failure.
 - (2.4) Never take next process until the component is cooled down to room temperature after reflow.
 - (2.5) After soldering, do not warp the circuit board.
 - (2.6) The recommended dip soldering profile is the following.



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