

Product specification of 20 x 20 mil IR LED chip

1. Scope:

This specification applies to metal bonding 20 x 20 mil IR LED chip, YL-C740-20CA3 ◦

2. Materials :

2.1 P-pad : Au alloy ◦

2.2 N-pad : Au alloy ◦

3. Dimensions :

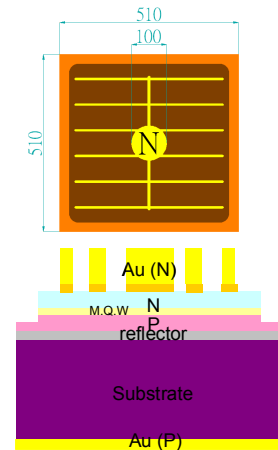
3.1 Chip size : $510 \pm 25 \mu\text{m} \times 510 \pm 25 \mu\text{m}$ ◦

3.2 N-pad : $\phi 100 \pm 10 \mu\text{m}$, thickness $3.5 \pm 0.3 \mu\text{m}$ ◦

3.3 Chip thickness : $200 \mu\text{m} \pm 25 \mu\text{m}$ ◦

4. Electro-optical characteristics and specification: ($T_a=25^\circ\text{C}$)

4.1 Electro-optical characteristics



Test parameter	Condition	Min	Typ	Max	Unit
Peak wavelength(Wp)	350mA	700	-	800	nm
Forward voltage(Vf1)	350mA	1.4	-	2.6	V
Forward voltage(Vf4)	10uA	0.7	-	-	V
Reverse current (Ir)	-10V	0	-	2	uA
Iv@735~745 nm	350mA	45	-	50	mW/sr
		50	-	60	
		60	-	70	

5. Absolute Maximum Ratings

Parameter	Symbol	Condition	Rating	Unit
Forward DC Current	If	$T_a=25^\circ\text{C}$	≤ 700	mA
Reverse Voltage	Vr	$T_a=25^\circ\text{C}$	≤ 10	V
Junction Temperature	Tj	-	≤ 115	$^\circ\text{C}$
Operating ambient temperature	Ta	Chip	-40~+85	$^\circ\text{C}$
Storage Temperature	Tstg	Chip-on-tape/storage	5~35	$^\circ\text{C}$
		Chip-on-tape/transportation	-20~+65	$^\circ\text{C}$
Temperature during Packaging	-	-	280(<10sec)	$^\circ\text{C}$

Notes: Maximum ratings are package dependent. The above maximum rating were determined using a metal core printed circuit board(MCPCB) without an encapsulant. Stresses in excess of the absolute maximum rating such as forward and junction temperature may cause damage to the led.

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* The detail technical and reliability datasheet are also available for your reference, please be free to contact us.