

光鋐科技股份有限公司

Epileds Technologies, Inc.

Product specification of 42 x42 mil red LED chip

1. Scope:

This specification applies to AlInGaP metal bonding 42 x 42mil red LED chip, BH-C4242N-A1 ◦

2. Materials :

2.1 P-pad : Au alloy ◦

2.2 N-pad : Au alloy ◦

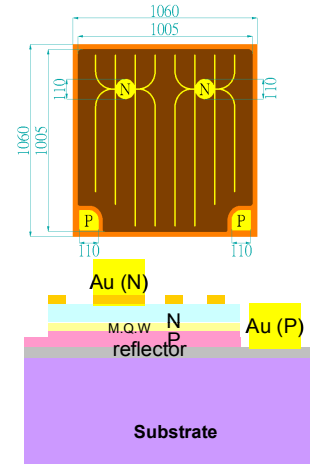
3. Dimensions :

3.1 Chip size : $1060 \pm 25 \mu\text{m} \times 1060 \pm 25 \mu\text{m}$ ◦

3.2 P-pad : $\phi 110 \pm 10 \mu\text{m}$, thickness $3.5 \pm 0.3 \mu\text{m}$ ◦

3.3 N-pad : $\phi 110 \pm 10 \mu\text{m}$, thickness $3.5 \pm 0.3 \mu\text{m}$ ◦

3.4 Chip thickness : $195 \mu\text{m} \pm 25 \mu\text{m}$ ◦



4. Electro-optical characteristics and specification: (Tc=25°C)

4.1 Electro-optical characteristics

Test parameter	Condition	Min	Typ	Max	Unit
Peak wavelength(Wp)	350mA	650	-	680	nm
Radiant intensity(I)	350m A	12	-	58	mW/sr
Forward voltage(Vf1)	350mA	1.8	-	2.8	V
Forward voltage(Vf4)	10uA	1.3	-	-	V
Reverse current (Ir)	-10V	0	-	2	uA
Iv@650~660 nm	350mA	37	-	40	mW/sr
		40	-	50	mW/sr
		50	-	60	mW/sr

5. Absolute Maximum Ratings

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

Rev.:2/10/2016

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