光鋐科技股份有限公司

Epileds Technologies, Inc.

Product specification of 42 x42 mil red *LED chip*

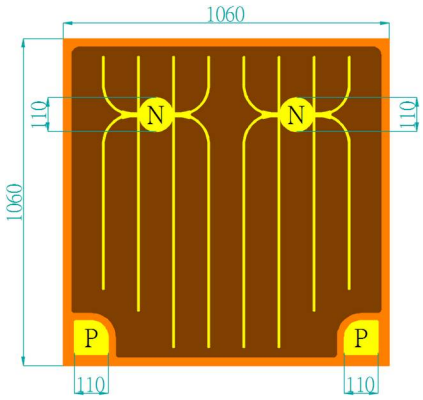
1. Scope:

This specification applies to AlInGaP metal bonding 42 x 42mil red LED chip, BH-R4242N-A1。

2. Materials：

2.1 P-pad：Au alloy。

2.2 N-pad：Au alloy。



3. Dimensions：

3.1 Chip size：1060±25μm x 1060±25μm。

3.2 P-pad：φ110±10μm, thickness 3.5±0.3μm。

3.3 N-pad：φ110±10μm, thickness 3.5±0.3μm。

3.4 Chip thickness：195μm±25μm。

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

4.1 Electro-optical characteristics

Test parameter	Condition	Min	Typ	Max	Unit
Dominant wavelength(Wd)	350mA	600	-	650	nm
Forward voltage(Vf1)	350mA	1.8	-	2.8	V
Forward voltage(Vf4)	10uA	1.3	-	-	V
Reverse current (Ir)	-10V	0	-	2	uA
Reverse voltage(Vz)	-10uA	25	-	--	V
IV@620~625nm	350mA	10000		10900	mcd
		10900		12000	
		12000		12500	

5. Absolute Maximum Ratings

Parameter	Symbol	Condition	Rating	Unit
Forward DC Current	If	Ta=25℃	≦700	mA
Reverse Voltage	Vr	Ta=25℃	≦10	V
Junction Temperature	Tj	-	≦115	℃
Storage Temperature	Tstg	Chip	-40~+85	℃
		Chip-on-tape/storage	5~35	℃
		Chip-on-tape/transportation	-20~+56	℃
Temperature during Packaging	-	-	280(＜10sec)	℃

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 encess 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.*