

光鎔科技股份有限公司

Epileds Technologies, Inc.

Product specification of 45 x45 mil green LED chip

1. Scope:

This specification applies to InGaN/GaN 45 x 45mil green LED chip, EP-G4545K-A3 ◦

2. Materials :

2.1 P-contact : Conductive Layer ◦

2.2 P-pad : Au ◦

2.3 N-pad : Au ◦

2.4 Backside Metal: Al

EP-G4545K-A3 : Reflective Layer (Al) with Au

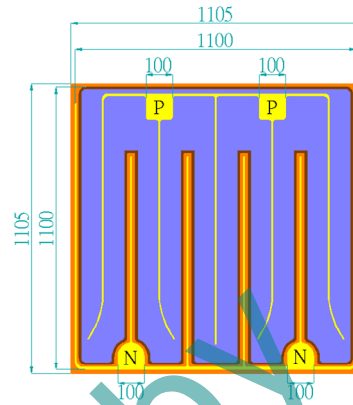
3. Dimensions :

3.1 Chip size : 1105±30µm x 1105±30µm ◦

3.2 P-pad : φ100±10µm, thickness 3.5±0.35µm ◦

3.3 N-pad : φ100±10µm, thickness 3.5±0.35µm ◦

3.4 Chip thickness : 150µm±10µm ◦



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	490	-	540	nm
Luminous intensity(Iv)	350mA	22500	-	52300	mcd
Forward voltage(Vf4)	10uA	1.7	-	2.5	V
Forward voltage(Vf1)	350mA	2.6	-	3.8	V
Reverse current (Ir)	-5V	0	-	2	uA

4.2 Electro-optical specification(Bin table) :

Wd				Iv		Vf1 (V)	Vf4 (V)	Ir (uA)
Bin	nm	Bin	nm	Bin	mcd			
BQ	490~492.5	GG	515~517.5	99	22500~24800	2.6~3.8	1.7~2.5	0~2
BR	492.5~495	GH	517.5~520	A0	24800~27000			
BS	495~497.5	GI	520~522.5	A7	27000~29700			
BT	497.5~500	GJ	522.5~525	A8	29700~32600			
GA	500~502.5	GK	525~527.5	A9	32600~35800			
GB	502.5~505	GL	527.5~530	B0	35800~39400			
GC	505~507.5	GM	530~532.5	B1	39400~43300			
GD	507.5~510	GN	532.5~535	B2	43300~47600			
GE	510~512.5	GO	535~537.5	B3	47600~52300			
GF	512.5~515	GP	537.5~540					

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