

光鋳科技股份有限公司

Epileds Technologies, Inc.

Product specification of 16 x 10 mil blue LED chip

1. Scope:

This specification applies to InGaN/GaN 16 x 10mil blue LED chip, EP-B1610A-A1 ◦

2. Materials :

2.1 P-contact : Conductive Layer ◦

2.2 P-pad : Au ◦

2.3 N-pad : Au ◦

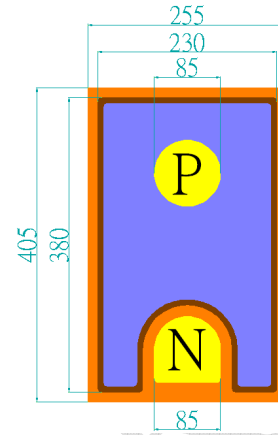
3. Dimensions :

3.1 Chip size : $405 \pm 20 \mu\text{m} \times 255 \pm 20 \mu\text{m}$ ◦

3.2 P-pad : $\phi 90 \pm 10 \mu\text{m}$, thickness $1.2 \pm 0.1 \mu\text{m}$ ◦

3.3 N-pad : $\phi 90 \pm 10 \mu\text{m}$, thickness $1.2 \pm 0.1 \mu\text{m}$ ◦

3.4 Chip thickness : $90 \mu\text{m} \pm 10 \mu\text{m}$ ◦



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

4.1 Electro-optical characteristics

Test parameter	Condition	Min	Typ	Max	Unit
Dominant wavelength(Wd)	20mA	445	-	475	nm
Radiant intensity(I)	20mA	5.6	-	13	mW/sr
Forward voltage(Vf4)	1uA	1.9	-	2.5	V
Forward voltage(Vf1)	20mA	2.6	-	3.8	V
Reverse current (Ir)	-8V	0	-	0.5	uA
Electrostatic discharge characteristic (ESD)	HBM	1000	-	-	V

4.2 Electro-optical specification(Bin table) :

Wd		I		Vf1	Vf4	Ir
Bin	nm	Bin	mW/sr	(V)	(V)	(uA)
PS	445~447.5	23	5.6~6	2.6~3.8	1.9~2.5	0~0.5
PT	447.5~450	24	6~6.5			
BA	450~452.5	25	6.5~7			
BB	452.5~455	26	7~7.6			
BC	455~457.5	27	7.6~8.2			
BD	457.5~460	28	8.2~8.8			
BE	460~462.5	29	8.8~9.5			
BF	462.5~465	30	9.5~10.3			
BG	465~467.5	31	10.3~11.1			
BH	467.5~470	32	11.1~12			
BI	470~472.5	33	12~13			
BJ	472.5~475					

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