

光鋳科技股份有限公司

Epileds Technologies, Inc.

Product specification of 38 x38 mil blue LED chip

1. Scope:

This specification applies to InGaN/GaN 38 x 38mil blue LED chip, EP-B3838B-A3 ◦

2. Materials :

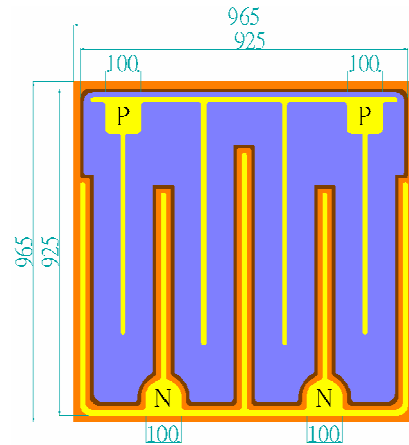
2.1 P-contact : Conductive Layer ◦

2.2 P-pad : Au ◦

2.3 N-pad : Au ◦

2.4 Backside Metal:

EP-B3838B -A3 : Reflective Layer (Al) with Au



3. Dimensions :

3.1 Chip size : $965 \pm 10 \mu\text{m} \times 965 \pm 10 \mu\text{m}$ ◦

3.2 P-pad : $\phi 100 \pm 10 \mu\text{m}$, thickness $1.2 \pm 0.1 \mu\text{m}$ ◦

3.3 N-pad : $\phi 100 \pm 10 \mu\text{m}$, thickness $1.2 \pm 0.1 \mu\text{m}$ ◦

3.4 Chip thickness : $150 \mu\text{m} \pm 10 \mu\text{m}$ ◦

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

4.1 Electro-optical characteristics

Test parameter	Condition	Min	Typ	Max	Unit
Dominant wavelength(Wd)	350mA	445	-	475	nm
Radiant intensity(I)	350mA	165	-	380	mW/sr
Forward voltage(Vf4)	10uA	1.9	-	2.5	V
Forward voltage(Vf1)	350mA	2.8	-	3.8	V
Reverse current (Ir)	-5V	0	-	2	uA

4.2 Electro-optical specification(Bin table) :

Wd		I		Vf4 (V)	Vf1 (V)	Ir (uA)
Bin	nm	Bin	mW/sr			
PS	445~447.5	12	165~180	1.9~2.5	2.8~3.8	0~2
PT	447.5~450	13	180~195			
BA	450~452.5	14	195~210			
BB	452.5~455	15	210~225			
BC	455~457.5	16	225~240			
BD	457.5~460	17	240~255			
BE	460~462.5	50	255~270			
BF	462.5~465	51	270~285			
BG	465~467.5	52	285~300			
BH	467.5~470	53	300~325			
BI	470~472.5	54	325~350			
BJ	472.5~475	55	350~380			

Rev.: 5/7/2010

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