

**光鋳科技股份有限公司**  
**Epileds Technologies, Inc.**  
 Product specification of 45 x45 mil blue LED chip.

1. Scope:

This specification applies to InGaN/GaN 45 x 45mil blue LED chip, EP-B4545V-A3 ◦

2. Materials :

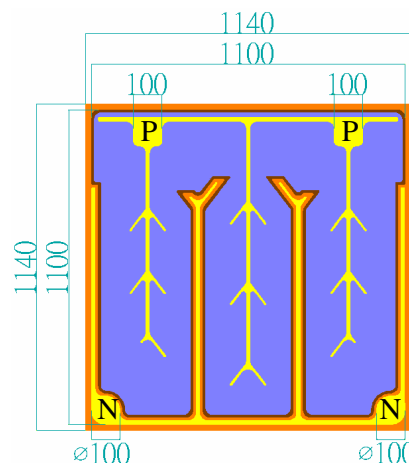
2.1 P-contact : Conductive Layer ◦

2.2 P-pad : Au ◦

2.3 N-pad : Au ◦

2.4 Backside Metal:

EP-B4545V -A3 : Reflective Layer (Al) with Au



3. Dimensions :

3.1 Chip size : 1140±10µm x 1140±10µm ◦

3.2 P-pad : φ100±10µm, thickness 1.2±0.1µm ◦

3.3 N-pad : φ100±10µm, thickness 1.2±0.1µm ◦

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	445	-	475	nm
Radiant intensity(I)	350mA	210	-	440	mW/sr
Forward voltage(Vf4)	10uA	2.0	-	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	15	210~225	1.9~2.5	2.8~3.8	0~2
PT	447.5~450	16	225~240			
BA	450~452.5	17	240~255			
BB	452.5~455	50	255~270			
BC	455~457.5	51	270~285			
BD	457.5~460	52	285~300			
BE	460~462.5	53	300~325			
BF	462.5~465	54	325~350			
BG	465~467.5	55	350~380			
BH	467.5~470	56	380~410			
BI	470~472.5	57	410~440			
BJ	472.5~475					

Rev.: 5/7/2010

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