

1. Scope:

This specification applies to InGaN/GaN 45 x 45mil UV LED chip, EP-U4545K-A3 ◦

2. Materials :

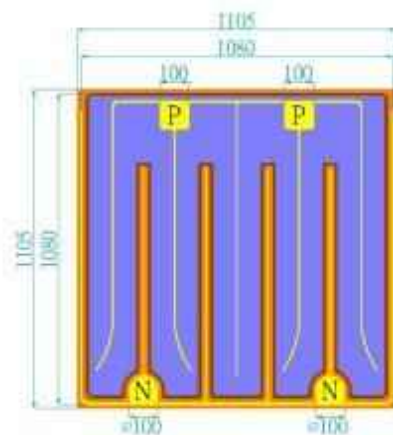
2.1 P-contact : Conductive Layer ◦

2.2 P-pad : Au ◦

2.3 N-pad : Au ◦

2.4 Backside Metal:

EP-U4545K -A3 : Reflective Layer (Al) with Au



3. Dimensions :

3.1 Chip size : 1140±30µm x 1140±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
Peak wavelength(Wp)	350mA	390	-	430	nm
Radiant intensity(I)	350mA	150	-	350	mW/sr
Forward voltage(Vf4)	10uA	1.9	-	-	V
Forward voltage(Vf1)	350mA	2.8	-	3.8	V
Reverse current (Ir)	-5V	0	-	2	uA

4.2 Electro-optical specification(Bin table) :

Wp				I		Vf4 (V)	Vf1 (V)	Ir (uA)
Bin	nm	Bin	nm	Bin	mW/sr			
VQ	390~392.5	EI	420~422.5	11	150~165	1.9~2.6	2.8~3.8	0~2
VR	392.5~395	EJ	422.5~425	12	165~180			
VS	395~397.5	EK	425~427.5	13	180~195			
VT	397.5~400	EL	427.5~430	14	195~210			
EA	400~402.5			15	210~225			
EB	402.5~405			16	225~240			
EC	405~407.5			17	240~255			
ED	407.5~410			50	255~270			
EE	410~412.5			51	270~285			
EF	412.5~415			52	285~300			
EG	415~417.5			53	300~325			
EH	417.5~420			54	325~350			

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

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