



SHARLIGHT ELECTRONICS CO., LTD.
NEW PRODUCTS INTRODUCTION



SHARLIGHT

T E C H N O L O G Y

265-940nm Products



SHARLIGHT ELECTRONICS CO., LTD.
NEW PRODUCTS INTRODUCTION

PKG Product Types

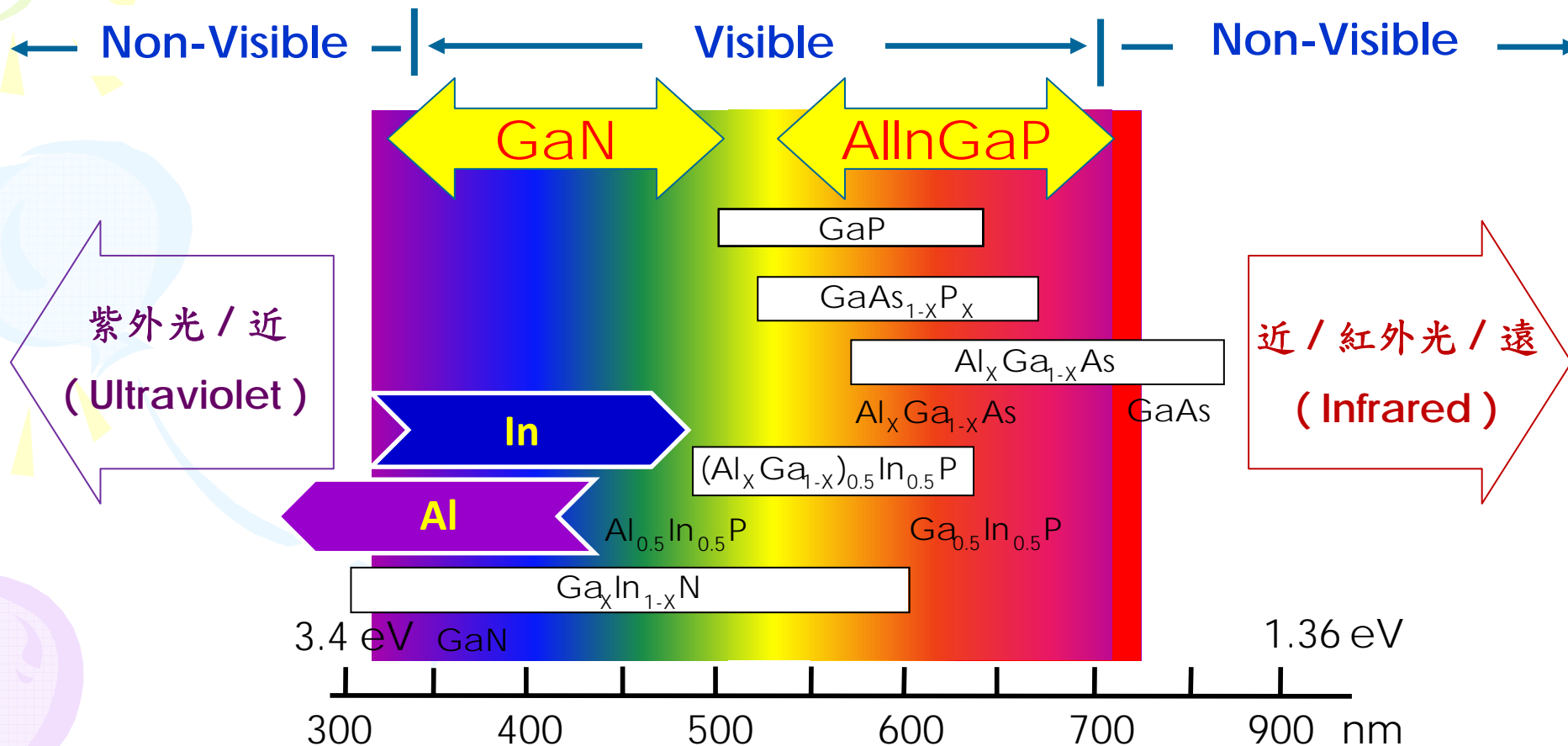
LED PKG Product Types and Color Table

Light Source Type \ Color, λ	PLCC	EMC	Ceramic Sub-mount			Glass	CSP	Emitter	COB	Light Engine		
White	White	White	White	White	White		White	White	Ultra-high CRI, R9 White	White	White	White
UV-C			UV-C			UV-C						
UV-B			UV-B									
UV-A	UV-A		UV-A	UV-A			UV-A	UV-A		UV-A	UV-A	UV-A
Blue	B	B	B	B			B	B		B	B	B
Green	G	G	G	G			G	G		G	G	G
Amber	A	A	A	A				A		A	A	A
Red	R	R	R	R			R	R		R	R	R
Multi-				RGBW	RB, RA			RGB *W		RGBW	RGBW	
IR 850	IR 850	IR 850	IR 850	IR 850				IR 850				IR 850
IR 940	IR 940	IR 940	IR 940	IR 940				IR 940			IR 940	

Lighting	Stage	Medical Cosmetology	Inspection	Safety and Security	Fishing and Plants	3C	Automotive
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Light Spectrum





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NEW PRODUCTS INTRODUCTION

介紹投影片內文大綱

A. UV (Ultraviolet)

- ① UV 市場應用
- ② 用於UV 應用相對應產品

B. IR (Infrared)

- ① IR 市場應用
- ② 用於IR 應用相對應產品



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NEW PRODUCTS INTRODUCTION

UV LED 應用

UV 265-430nm



主要應用領域說明

- 工業
 - 固化
 - 油墨：印刷油墨, PCB防焊層油墨
 - 塗料：木材塗料, 汽車零組件塗料
 - 膠材：接著膠材, 批覆膠材
 - 曝光：PCB曝光, 半導體曝光
 - 檢測：汙漬檢測, 瑕疵檢測
- 顯像
 - 防偽
 - 隱藏裝飾顯像
- 醫療美容：美甲
- 水族



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NEW PRODUCTS INTRODUCTION

主要應用領域說明

- 目前市場UV LED應用以 UVA波段為主
- 主要是 固化 油墨 (Ink)、塗料 (Coating)、黏著材料 (Adhesives) 應用

Ink (油墨)



- Digital Printing(數碼印刷)
- Screen Printing (網版印刷)
- Flexographic Printing (柔版印刷)

Coating (塗料)



- Wood (Flooring, Cabinets, Doors) (木器塗裝)
- Automotive (汽車產業)
- Industrial (工業)

Adhesives (黏著)



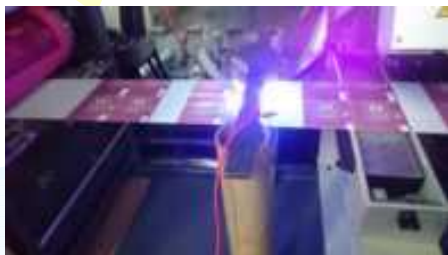
- Labels (標籤)
- Medical (醫療)
- Industrial (工業)
- Optical Manufacturing (光學製造加工)



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NEW PRODUCTS INTRODUCTION

Ink | 油墨



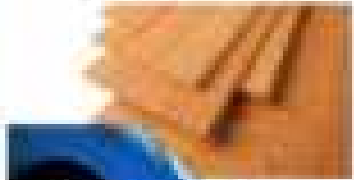
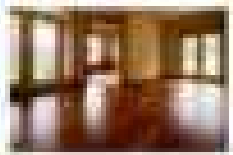
- Digital Inkjet | 數位噴墨
- Screen | 網版印刷
- Flexographic | 柔性版印刷
- Offset | 膠版印刷





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Coating | 塗料



- Automotive | 汽車
- Wood Coatings | 木器漆
- Vinyl
- Instruments





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Adhesives | 黏著



- Displays
- Medical
- Electronics
- Industrial





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發展中與進階UV光應用

- 殺菌
- 水質淨化
- 工業螢光染料洩漏偵查 - HVAC, 汽車, 魚類
- 將螢光成分特殊圖案加在紙鈔上 - 偽造偵查 (貨幣, 古董, 藝術)

水質淨化	洩漏偵測	偽造偵查
 <p><u>UVC</u></p>	 <p><u>UVA</u></p>	 <p><u>UVA</u></p>



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NEW PRODUCTS INTRODUCTION

UV PKG 產品

UV 275-430NM



Solution

275NM

940NM



400nm

700nm

Wavelength [nm]



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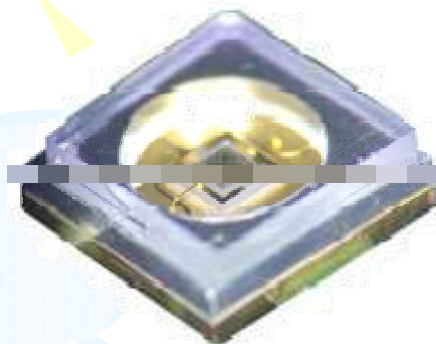
NEW PRODUCTS INTRODUCTION

UV 封裝產品總覽

UVC : 265-285nm

Cu, Ceramic Carrier

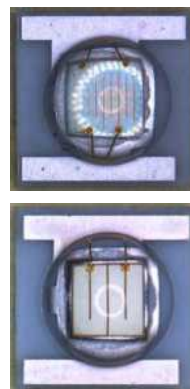
UVA : 365-430nm



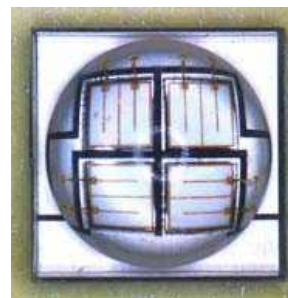
Size :
4.4mm x 4.4mm x 1.5mm



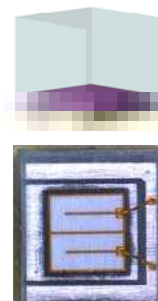
4444



3535



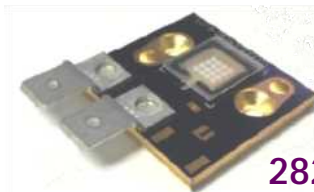
5050



CSP 1818



2856



2828

NOTE : Detail characteristic refers specification.

Chip	Chip Type	UV-C 265-285nm	UV-A 365-430nm	Application
Single	Flip Chip	4444	3535	<ul style="list-style-type: none"> • Industry • Stage, Sign • Medical • Cosmetology • Fishing and Plants • Disinfect
	Wire-bind	—	3535	
Four	Wire-bind	—	5050	
Multi-	Wire-bind	—	2828, 2856	



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IR LED 應用

IR 740 850 940nm





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NEW PRODUCTS INTRODUCTION

主要應用領域說明

- 監視器
- 夜視鏡補光
- 工業檢測
- 虹膜辨識



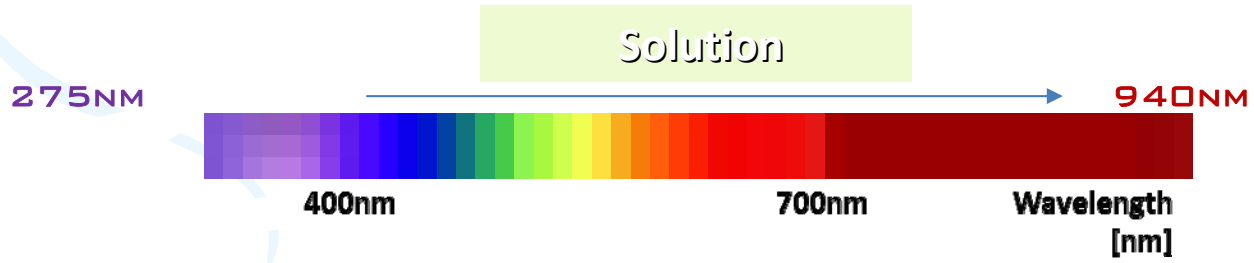
ALLREMOTE
WORLD OF REMOTE CONTROL



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NEW PRODUCTS INTRODUCTION

IR PKG 產品

IR 660-950NM





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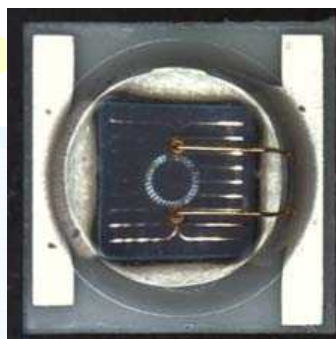
NEW PRODUCTS INTRODUCTION

Infrared (IR) Products

660nm · 740nm

Cu, Ceramic Carrier

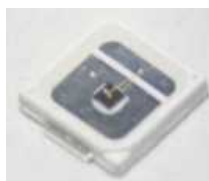
850nm · 940nm



3535



3030



5050



CSP 1818



2828

Size :
3.5mm x 3.5mm x 2.1mm

NOTE : Detail characteristic refers specification.

Chip	Chip Type	IR 660-740-810-830-850-940nm	Application
Single	Wire-bind WB	3535, 3030, CSP	<ul style="list-style-type: none"> • Industry • Medical • Cosmetology • Plants • Defect Detection
Four	Wire-bind WB	5050	
Multi-	Wire-bind WB	2828	