

■ Features:

- 1.6mmx0.8mm SMD, 0.8mm THICKNESS.
- Mono-color type, Ultra brightness
- Compatible with automatic placement equipment
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- PACKAGE: 4KPCS/REEL.

■ Electrical-optical characteristics: (Ta=25°C) (Test Condition: IF=20mA)

Part Number	Chip			Lens Type	Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:mcd		Viewing
	Emitted Color	Material	λ _P (nm)		Typ	Max	Min.	Typ.	Angle 2θ1/2 (deg)
									130
FYLS-0603UDR	Ultra Red	AlGaAs	655	Water Clear	2.10	2.50	22	55	130
FYLS-0603UHR	Ultra Red	AlGaAs	645		2.10	2.60	30	80	
FYLS-0603UEC	Ultra Orange	AlGaAs	630		2.10	2.50	30	80	
FYLS-0603UHD	Ultra Orange	AlGaAs	618		2.10	2.60	50	110	
FYLS-0603UYO	Ultra Amber	AlGaInP	610		2.10	2.60	30	80	
FYLS-0603UYC	Ultra Yellow	AlGaInP	593		2.10	2.60	25	70	
FYLS-0603UGC	Ultra Green	AlGaInP	575		2.20	2.70	10	40	
FYLS-0603PGC	Ultra Pure Green	InGaN	525		3.50	4.20	50	100	
FYLS-0603BGC	Ultra Bluish Green	InGaN	505		3.50	4.20	50	110	
FYLS-0603DNB	Blue	InGaN	470		3.50	4.20	10	33	
FYLS-0603UBC	Ultra Blue	InGaN	470		3.50	4.20	10	30	
FYLS-0603UWC	Ultra White	InGaN	/		3.50	4.20	40	200	

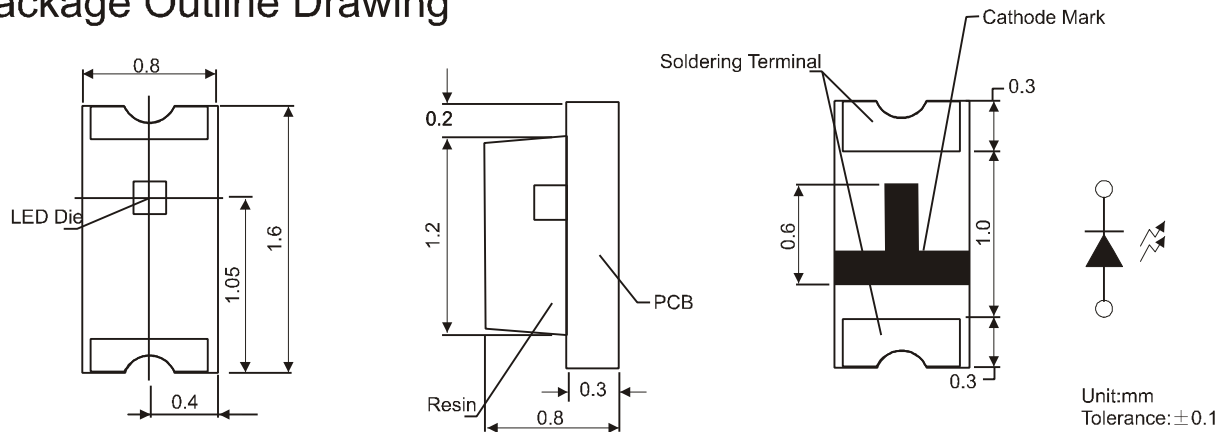
■ Absolute maximum ratings (Ta=25°C)

Parameter	UDR	UHR	UE	UHD	UYO	UY	UG	PG	BG	DNB	UB	UW	Unit
Forward Current I _F	30	30	30	30	30	30	30	30	30	30	30	30	mA
Power Dissipation P _d	78	78	78	78	78	78	78	78	78	78	78	78	mW
Reverse Voltage V _R	5	5	5	5	5	5	5	5	5	5	5	5	V
Peak Forward Current I _{PF} (Duty 1/10 @1KHZ)	100	100	100	100	100	100	100	100	100	100	100	100	mA
Operation Temperature T _{OPR}	-30 to +80												
Storage Temperature T _{STG}	-40 to +85												
Lead Soldering Temperature T _{SOL}	Max.260 ± 5 for 3 sec Max. (1.6mm from the base of the epoxy bulb)												

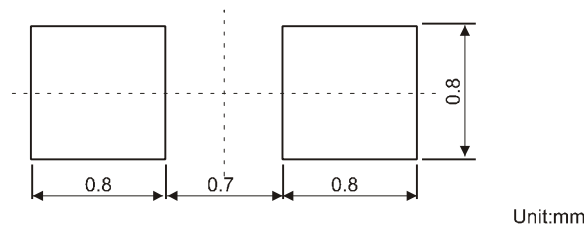
■ **Package configuration & Internal circuit diagram:**

FYLS-0603xx

Package Outline Drawing



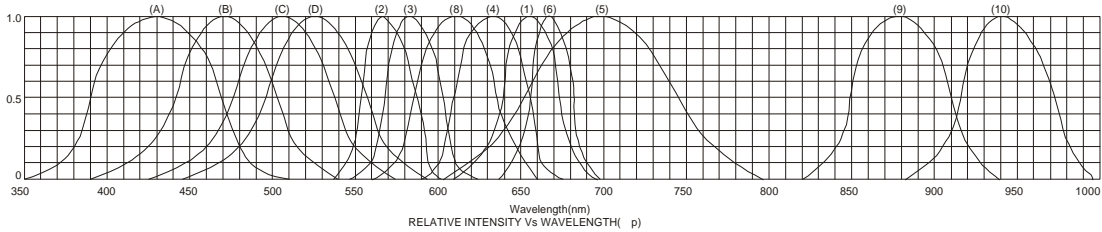
Recommended Soldering Pad Dimensions



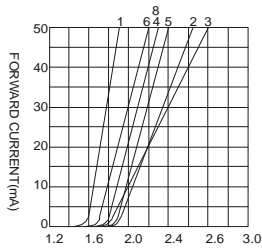
Notes:

- All dimensions are in millimeters (inches)
- Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
- Specifications are subject to change without notice.

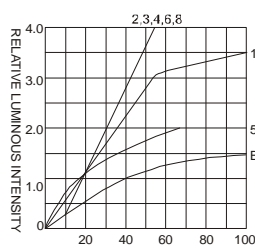
■ Typical electrical-optical characteristics curves:



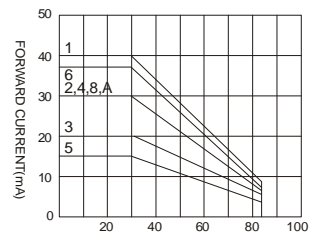
- | | |
|---|--------------------------------------|
| (1) - GaAsP/GaAs 655nm/Red | (9) - GaAlAs 880nm |
| (2) - GaP 570nm/Yellow Green | (10) - GaAs/GaAs & GaAlAs/GaAs 940nm |
| (3) - GaAsP/GaP 585nm/Yellow | (A) - GaN/SiC 430nm/Blue |
| (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red | (B) - InGaN/SiC 470nm/Blue |
| (5) - GaP 700nm/Bright Red | (C) - InGaN/SiC 505nm/Ultra Green |
| (6) - GaAlAs/GaAs 660nm/Super Red | (D) - InGaAl/SiC 525nm/Ultra Green |
| (8) - GaAsP/GaP 610nm/Super Red | |



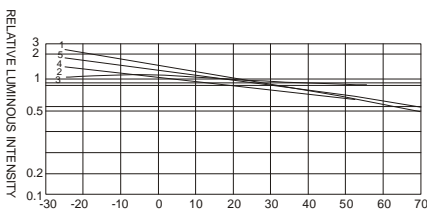
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



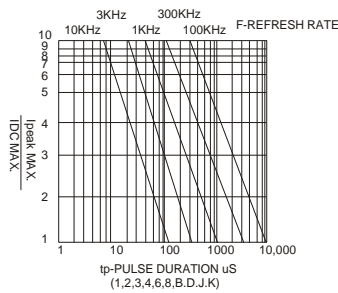
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



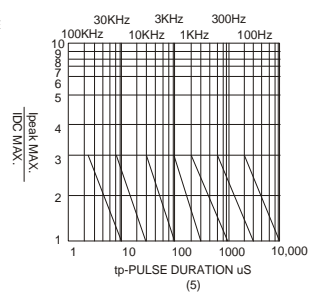
AMBIENT TEMPERATURE Ta(°C)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta(°C)



tp-PULSE DURATION μs
(1,2,3,4,6,8,B,D,J,K)



tp-PULSE DURATION μs
(5)

NOTE:25 free air temperature unless otherwise specified

■ **Tape Specifications**

Unit : mm

Tolerance : ± 0.1

