

**Features:**

- 3.2mmx1.6mm SMD, 1.1mm THICKNESS.
- STANDARD BRIGHTNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- PACKAGE : REEL.

**Part No.:**

FYLS-1206Hx
FYLS-1206SRx
FYLS-1206LRx
FYLS-1206URx
FYLS-1206Ex
FYLS-1206Ax
FYLS-1206Yx
FYLS-1206Gx

Note:X = Len Color: C=Water Clear, D=Color Diffused, T=Color Trans

**Description:**

- Color Code & Chip characteristics: (Test Condition: IF=20mA)

Emitting Color	Dice Material	Peak Wave Length (λ P)	Spectral Line halfwidth(λ 1/2)	Forward Voltage(VF) Unit:V		Luminous Intensity (lv) Unit:ucd
				Typ	Max	
H Red	GaP/GaP	700nm	90nm	2.25	2.60	500
S Hi Red	GaAlAs/GaAs,SH	660nm	20nm	1.85	2.20	3500
LR Super Red	AlGaAs,DH	660nm	20nm	1.85	2.20	6000
UR Ultra Red	GaAlAs/GaAs,DD H	660nm	20nm	1.85	2.20	7000
E Orange	GaAsP/GaP	635nm	35nm	2.10	2.50	2500
A Amber	GaAsP	610nm	35nm	2.10	2.50	2000
Y Yellow	GaAsP/GaP	585nm	35nm	2.10	2.50	2000
G Green	GaP/GaP	570nm	30nm	2.20	2.50	2500

**Electrical-optical characteristics: (Ta=25 )**

Parameter	Symbol	AlGaAs	GaAsP	AlGaInP	InGaN	Unit
Power Dissipation	$P_{ad}$	60	80	75	120	mW
Peak Forward Current *	$I_{pf}$	150	150	150	100	mA
Continuous Forward Current	$I_{af}$	25	30	30	30	mA

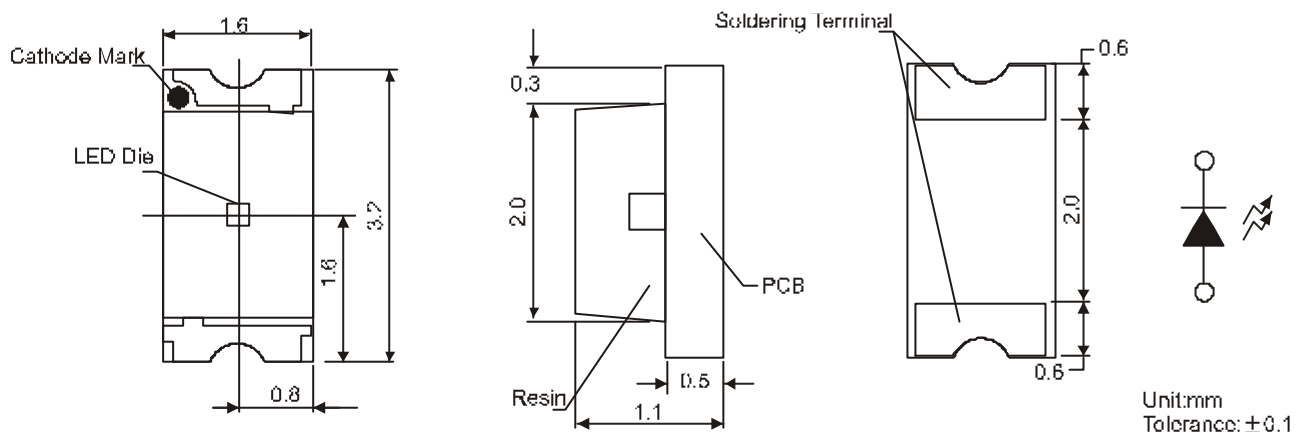
Notes:

- \* Test Condition = Duty 0.1,10KHZ

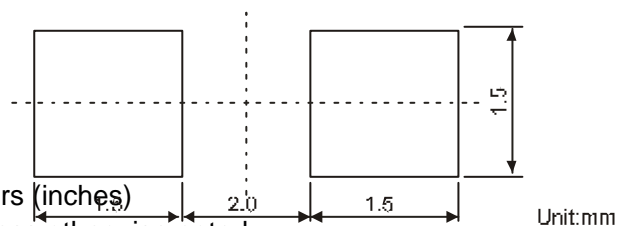
**Package configuration & Internal circuit diagram:**

# FYLS-1206xx

## Package Outline Drawing



## Recommended Soldering Pad Dimensions



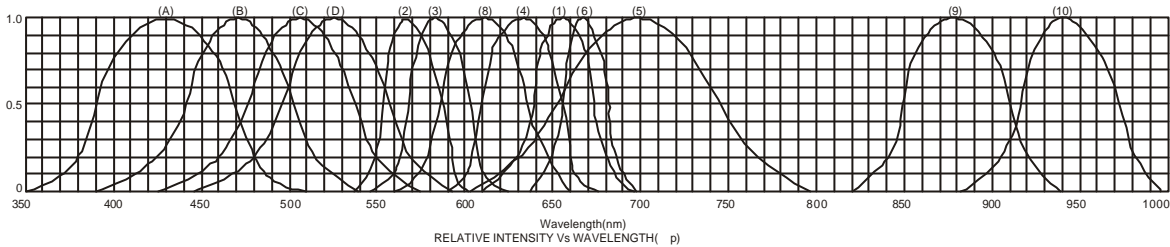
Notes:

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

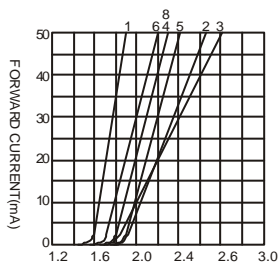
**Absolute maximum ratings (Ta=25 )**

Reverse Voltage	5V
Reverse Current	20 $\mu$ A
Operating Temperature Range	-40 to +85
Storage Temperature Range	-40 to +85
Lead Solder Temperature (1.6mm(1/16") from body)	230 for 5 Seconds

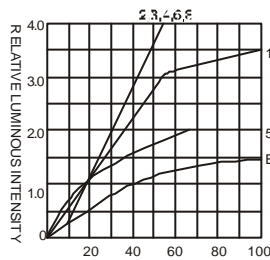
**Typical electrical-optical characteristics curves:**



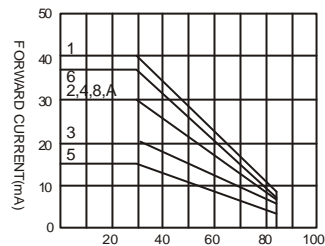
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) -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



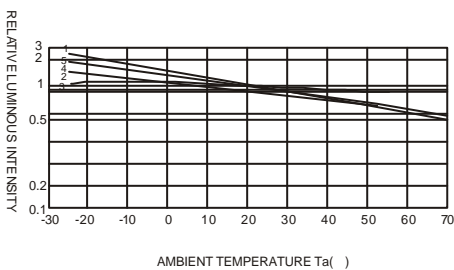
FORWARD VOLTAGE (Vf)  
FORWARD CURRENT VS.  
FORWARD VOLTAGE



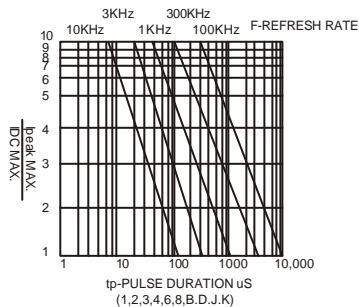
FORWARD CURRENT (mA)  
RELATIVE LUMINOUS  
INTENSITY VS. FORWARD  
CURRENT



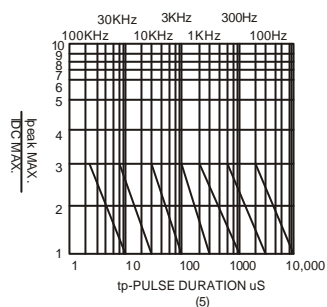
AMBIENT TEMPERATURE Ta ( °C )  
FORWARD CURRENT VS. AMBIENT  
TEMPERATURE



AMBIENT TEMPERATURE Ta ( °C )



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



(5)

NOTE: 25 free air temperature unless otherwise specified

**Tape Specifications**

Unit : mm

Tolerance :  $\pm 0.1$

