

LED Alphanumeric Display

Part No. 08FY8013BD

LED NUMERIC DISPLAY

FYS-8013ABXX-XX

[Back to LED Main Page](#)**■ Features:**

- 20.32mm (0.8") Single digit numeric display series
- Standard brightness
- Low current operation.
- Excellent character appearance.
- Easy mounting on P.C.boards or sockets.
- I.C.compatible.

■ Part No.:

Common Cathode	Iv TYP.(mcd)	Common Anode	Iv TYP.(mcd)
FYS-8013AH-XX	8.5	FYS-8013BH-XX	8.5
FYS-8013AS-XX	59.5	FYS-8013BS-XX	59.5
FYS-8013AD-XX	102	FYS-8013BD-XX	102
FYS-8013AUR-XX	204	FYS-8013BUR-XX	204
FYS-8013AE-XX	42.5	FYS-8013BE-XX	42.5
FYS-8013AY-XX	34	FYS-8013BY-XX	34
FYS-8013AG-XX	42.5	FYS-8013BG-XX	42.5

■ Description:

- Color Code & Chip characteristics: (Test Condition: IF=30mA)

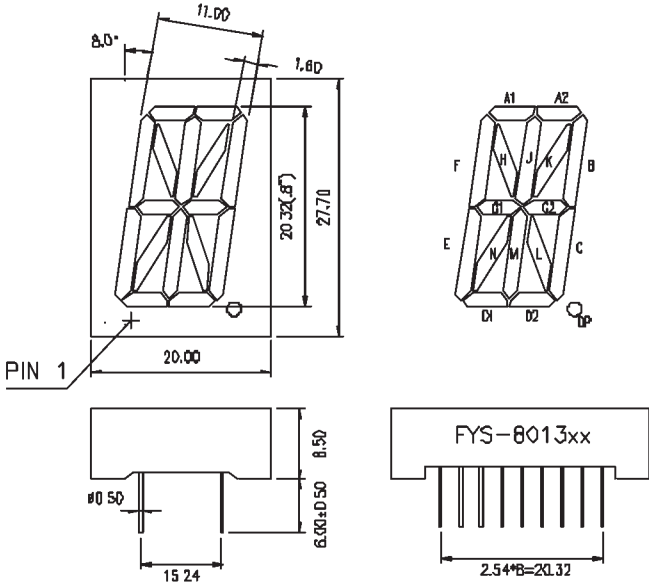
Emitting Color	Dice Material	Peak Wave Length (λ_p)	Spectral Line halfwidth($\Delta \lambda/2$)	Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:ucd
				Typ	Max	
H Red	GaP/GaP	700nm	90nm	2.25	2.60	500
S Hi Red	GaAlAs/GaAs,SH	660nm	20nm	1.85	2.20	3500
D Super Red	GaAlAs/GaAs,DH	660nm	20nm	1.85	2.20	6000
UR Ultra Red	GaAlAs/GaAs,DD H	660nm	20nm	1.85	2.20	12000
E Orange	GaAsP/GaP	635nm	35nm	2.10	2.50	2500
Y Yellow	GaAsP/GaP	585nm	35nm	2.10	2.50	2000
G Green	GaP/GaP	570nm	30nm	2.20	2.50	2500

- -XX: Surface / Lens color:

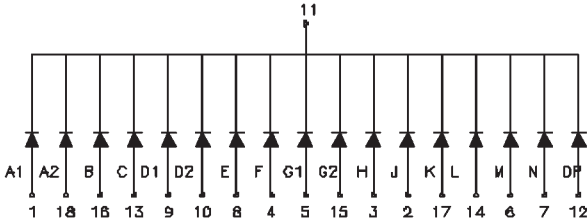
Number	0	1	3	3	4	5
Ref Surface Color	White	Black	Gray	Red	Green	
Epoxy Color	Water clear	White diffused	Red Diffused	Green Diffused	Yellow Diffused	

Package configuration & Internal circuit diagram:

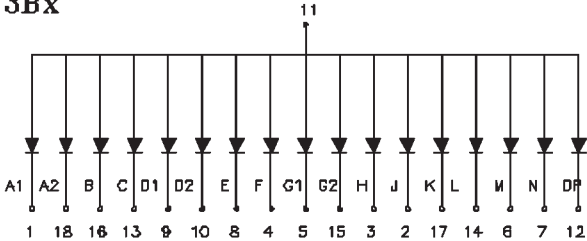
FYS-8013 series



FYS-8013Ax



FYS-8013Bx



Notes:

- All dimensions are in millimeters (inches)
- Tolerance is $\pm 0.35(0.01)$ unless otherwise noted.
- Specifications are subject to change without notice.

Electrical-optical characteristics: (Ta=35°C)

Parameter	Symbol	GaP(Red)	AlGaAs	GaAsP	GaP(Green)	Unit
Power Dissipation	P_{ad}	40	60	80	80	mW
Peak Forward Current *	I_{pf}	50	150	150	150	mA
Continuous Forward Current	I_{af}	15	35	30	30	mA

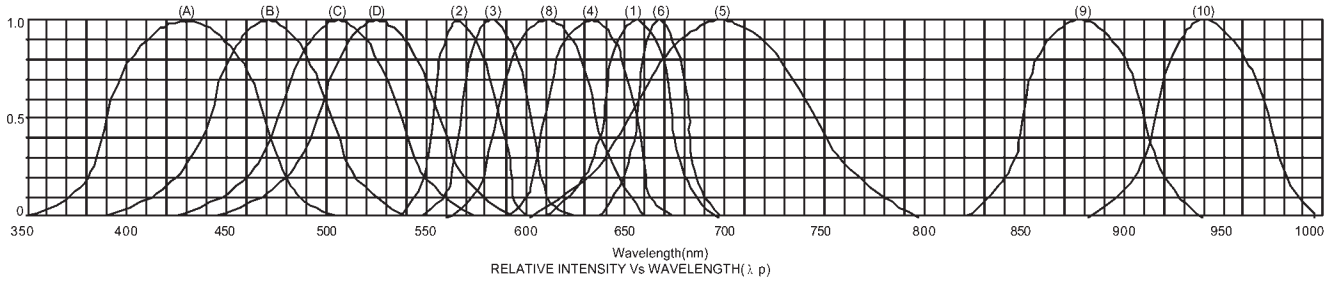
Notes:

- * Test Condition = Duty 0.1,10KHZ

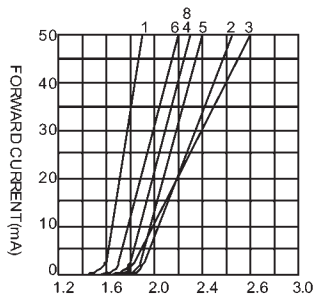
Absolute maximum ratings (Ta=35°C)

Reverse Voltage	5V
Reverse Current	30 μ A
Operating Temperature Range	-40°C to +85°C
Storage Temperature Range	-40°C to +85°C
Lead Solder Temperature (1.6mm(1/16") from body)	330°C for 5 Seconds

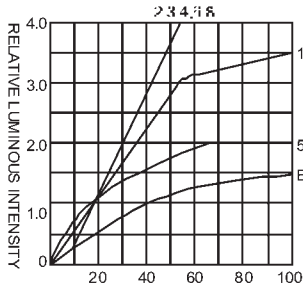
■ Typical electrical-optical characteristics curves:



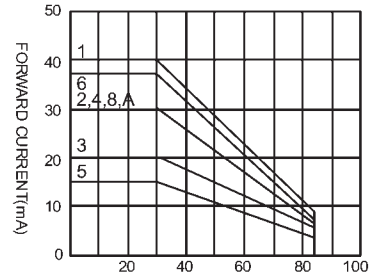
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) -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



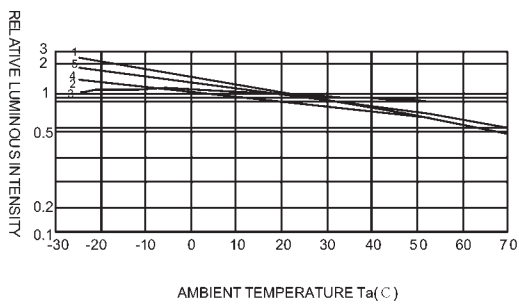
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



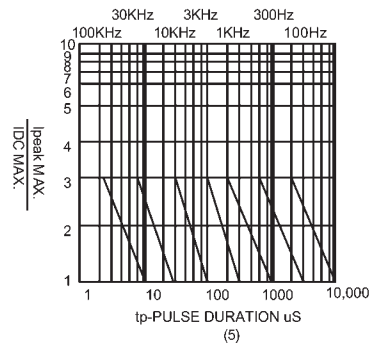
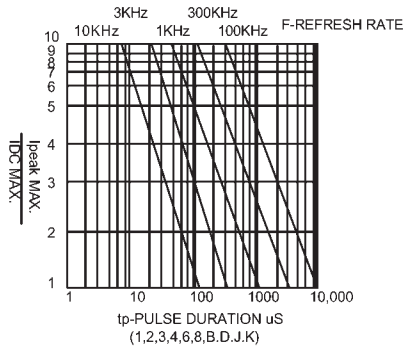
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



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



AMBIENT TEMPERATURE Ta(°C)



NOTE:25°C free air temperature unless otherwise specified