

LED Alphanumeric Display

Part No. 08FY15012BD

LED NUMERIC DISPLAY

FYS-15012ABXX-XX

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

- 38.0mm (1.50") 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-15012AH-XX	13	FYS-15012BH-XX	13
FYS-15012AS-XX	91	FYS-15012BS-XX	91
FYS-15012AD-XX	156	FYS-15012BD-XX	156
FYS-15012AUR-XX	312	FYS-15012BUR-XX	312
FYS-15012AE-XX	65	FYS-15012BE-XX	65
FYS-15012AY-XX	52	FYS-15012BY-XX	52
FYS-15012AG-XX	65	FYS-15012BG-XX	65

Description:

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

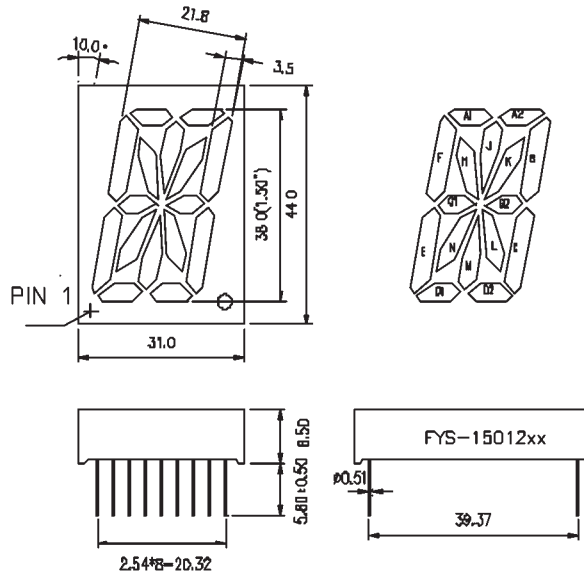
Emitting Color		Dice Material	Peak Wave Length (λ_P)	Spectral Line halfwidth($\Delta \lambda_{1/2}$)	Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:ucd
					Typ	Max	
H	Red	GaP/GaP	700nm	90nm	2.25	2.60	500
S	Hi Red	GaAlAs/GaAs,SH	660nm	20nm	1.85	2.20	3500
D	Super Red	GaAlAs/GaAs,DH	660nm	20nm	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:

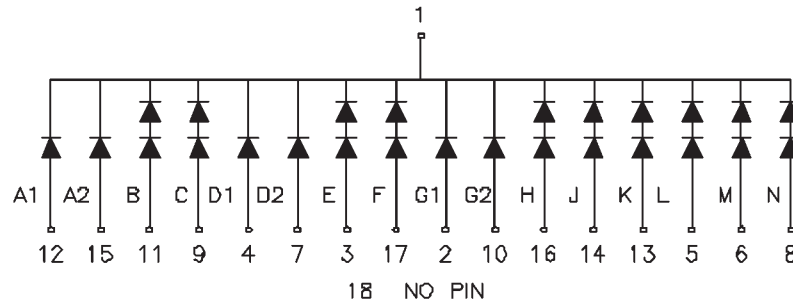
Number	0	1	2	3	4	5
Ref Surface Color	White	Black	Gray	Red	Green	
Epoxy Color	Water clear	White diffused	Red Diffused	Green Diffused	Yellow Diffused	

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

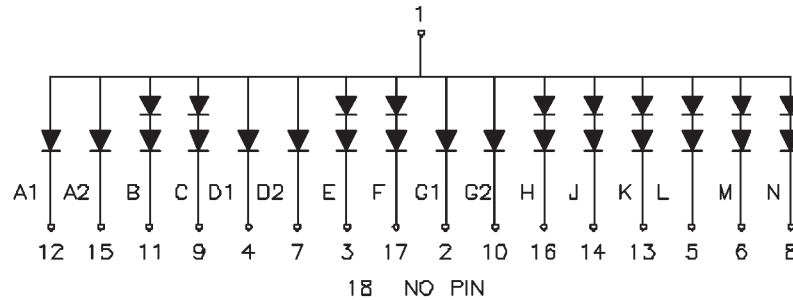
FYS-15012 Series



FYS-15012Ax



FYS-15012Bx



Notes:

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

Electrical-optical characteristics: (Ta=25°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	25	30	30	mA

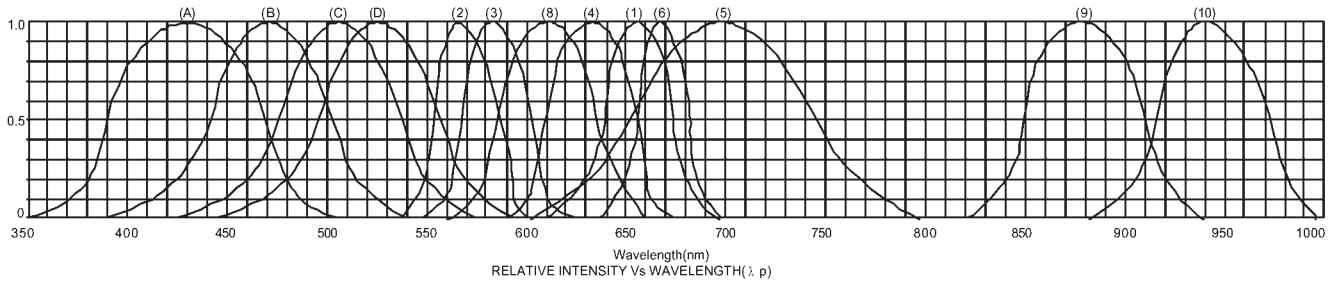
Notes:

· * Test Condition = Duty 0.1,10KHZ

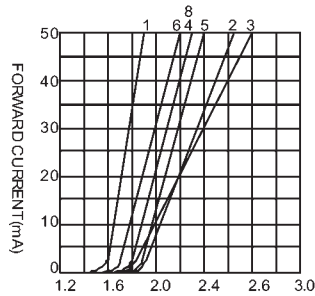
Absolute maximum ratings (Ta=25°C)

Reverse Voltage	5V
Reverse Current	20 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) 230 C for 5 Seconds	

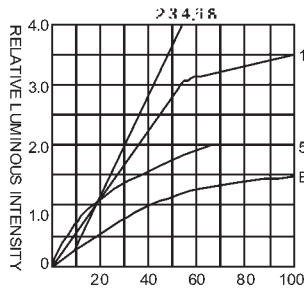
■ Typical electrical-optical characteristics curves:



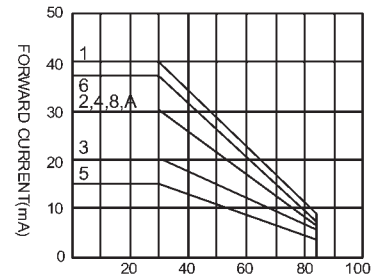
- | | |
|---|--------------------------------------|
| (1) - GaAsP/GaAs 655nm/Red | (9) - GaAlAs 880nm |
| (2) - GaP 570nm/Yellow Green | (10) - GaAs/GaAs & GaAlAs/GaAs 940nm |
| (3) - GaAsP/GaP 585nm/Yellow | (A) - GaN/SiC 430nm/Blue |
| (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red | (B) - InGaN/SiC 470nm/Blue |
| (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 | |



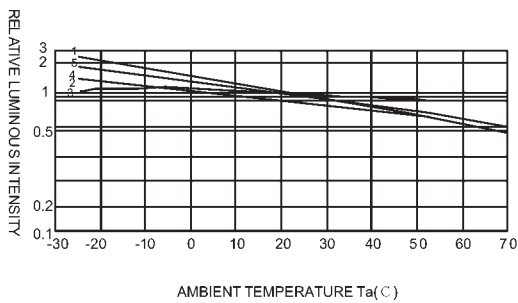
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



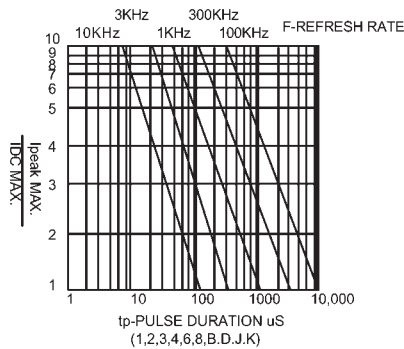
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



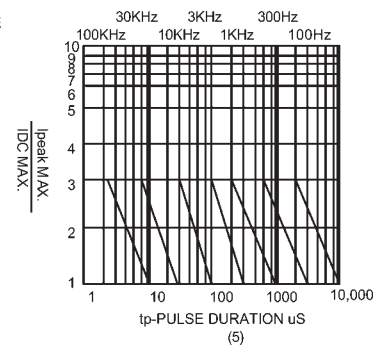
AMBIENT TEMPERATURE Ta(°C)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta(°C)



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



(5)

NOTE: 25 °C free air temperature unless otherwise specified