LED NUMERIC DISPLAY, 1 DIGIT

BL-S50X-12XX

Features:

- 12.70 mm (0.5") Single digit numeric display series, BI-COLOR TYPE
- Low current operation.
- Excellent character appearance.
- Easy mounting on P.C. Boards or sockets.
- I.C. Compatible.
- ROHS Compliance.

RoHs Compliance

ATTENTION
OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES

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

Part No		Chip			VF Unit:V		Iv
Common Cathode	**Common Anode**	**Emitted Color**	**Material**	**λP (nm)**	**Typ**	**Max**	**TYP.(mcd)**
BL-S50A-12SG-XX	BL-S50B-12SG-XX	Super Red	AlGaInP	660	2.10	2.50	15
		Green	GaP/GaP	570	2.20	2.50	22
BL-S50A-12EG-XX	BL-S50B-12EG-XX	Red	GaAsP/GaP	635	2.10	2.50	22
		Green	GaP/GaP	570	2.20	2.50	22
BL-S50A-12DUG-XX	BL-S50B-12DUG-XX	Ultra Red	AlGaInP	660	2.10	2.50	23
		Ultra Green	AlGaInP	574	2.20	2.50	25
BL-S50A-12UEUG-XX	BL-S50B-12UEUG-XX	Ultra Red	AlGaInP	630	2.10	2.50	25
		Ultra Green	AlGaInP	574	2.20	2.50	25

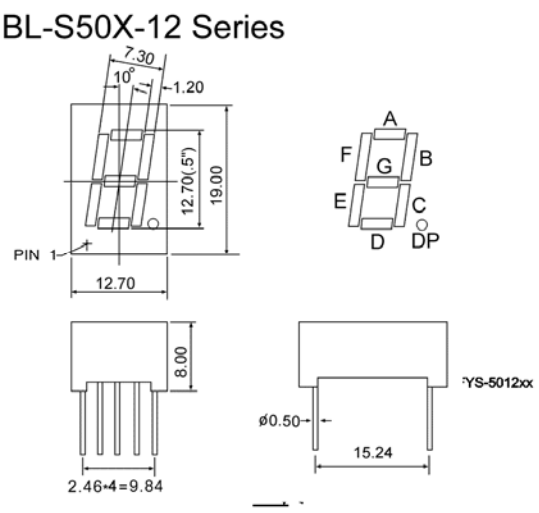
■ -XX: Surface / Lens color:

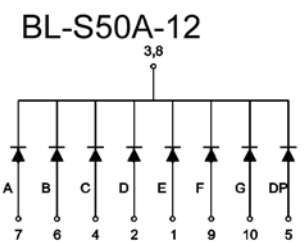
Number	0	1	2	3	4	5
Ref Surface Color	White	Black	Gray	Red	Green	
Epoxy Color	Water clear	White diffused	Red Diffused	Green Diffused	Yellow Diffused	

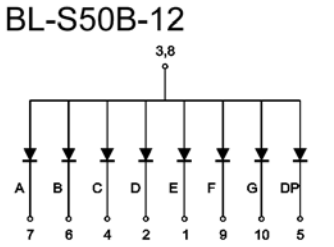
■ **Absolute maximum ratings (Ta=25°C)**

Parameter	S	G	E	D	UG	UE			Unit
Forward Current I_F	30	30	30	30	30	30			mA
Power Dissipation P_d	75	80	80	75	75	65			mW
Reverse Voltage V_R	5	5	5	5	5	5			V
Peak Forward Current I_{PF} (Duty 1/10 @1KHZ)	150	150	150	150	150	150			mA
Operation Temperature T_{OPR}	-40 to +80								°C
Storage Temperature T_{STG}	-40 to +85								°C
Lead Soldering Temperature T_{SOL}	Max.260±5°C for 3 sec Max. (1.6mm from the base of the epoxy bulb)								°C

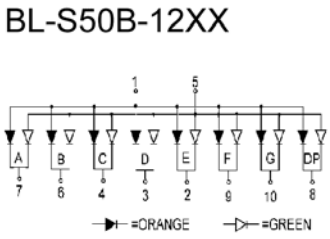
■ Package configuration & Internal circuit diagram





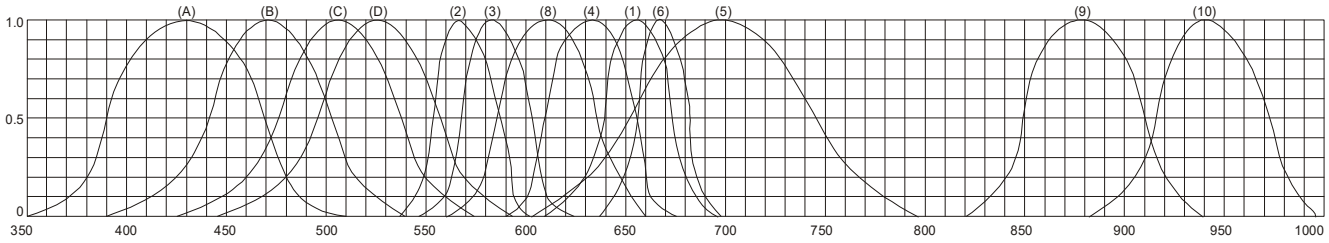






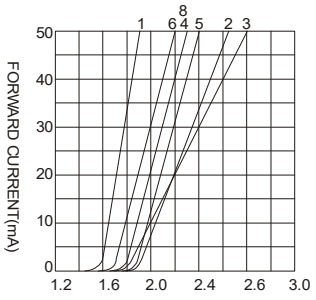
Notes:
1. All dimensions are in millimeters (inches)
2. Tolerance is ±0.25(0.01")unless otherwise noted.
3. Specifications are subject to change without notice.

■ Typical electrical-optical characteristics curves:

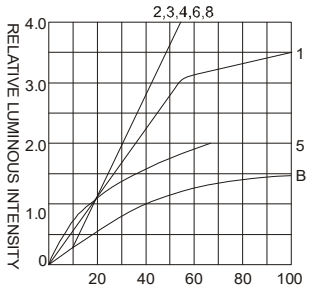


RELATIVE INTENSITY Vs WAVELENGTH(λ p)

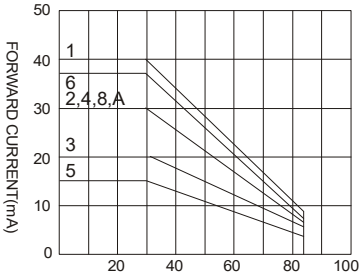
(1) - GaAsP/GaAs 655nm/Red
(2) - GaP 570nm/Yellow Green
(3) - GaAsP/GaP 585nm/Yellow
(4) - GaAsp/GaP 635nm/Orange & Hi-Eff Red
(5) - GaP 700nm/Bright Red
(6) - GaAlAs/GaAs 660nm/Super Red
(8) - GaAsP/GaP 610nm/Super Red
(9) - GaAlAs 880nm
(10) - GaAs/GaAs & GaAlAs/GaAs 940nm
(A) - GaN/SiC 430nm/Blue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



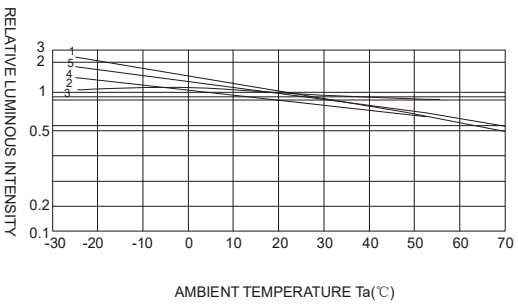
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



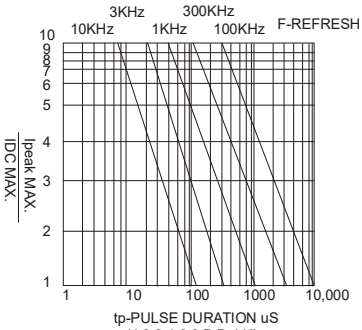
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



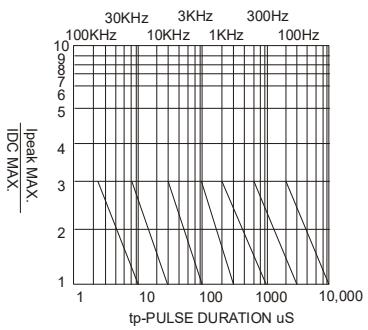
AMBIENT TEMPERATURE Ta(℃)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta(℃)



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



tp-PULSE DURATION uS
(5)

NOTE:25℃ free air temperature unless otherwise specified

■ Packing and weighting

