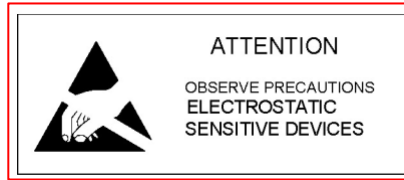


LED NUMERIC DISPLAY, 1 DIGIT
BL-S50X-12XX
Features:

- 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.


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

Part No		Chip			VF Unit:V		Iv TYP.(mcd)
Common Cathode	Common Anode	Emitted Color	Material	λ _P (nm)	Typ	Max	
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	Orange	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 Orange	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)

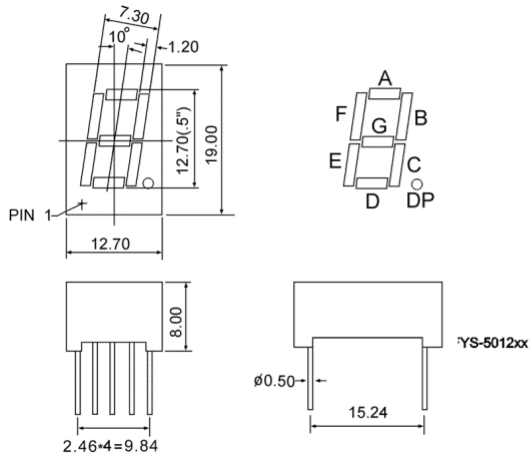
Parameter	S	G	E	D	UG	UE		U nit
Forward Current I _F	30	30	30	30	30	30		mA
Power Dissipation P _d	75	80	80	75	75	65		mW
Reverse Voltage V _R	5	5	5	5	5	5		V
Peak Forward Current I _{PF} (Duty 1/10 @1KHZ)	150	150	150	150	150	150		mA
Operation Temperature T _{OPR}	-40 to +80							
Storage Temperature T _{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)							

LED NUMERIC DISPLAY, 1 DIGIT

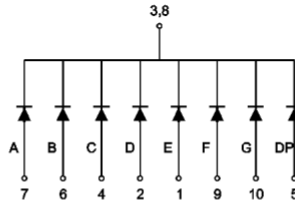
BL-S50X-12XX

Package configuration & Internal circuit diagram

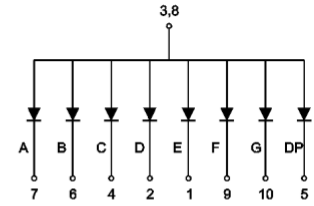
BL-S50X-12 Series



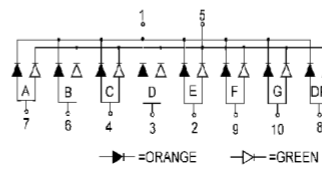
BL-S50A-12



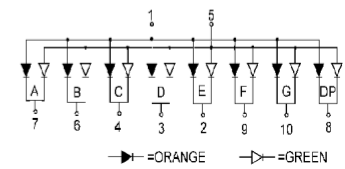
BL-S50B-12



BL-S50A-12XX



BL-S50B-12XX



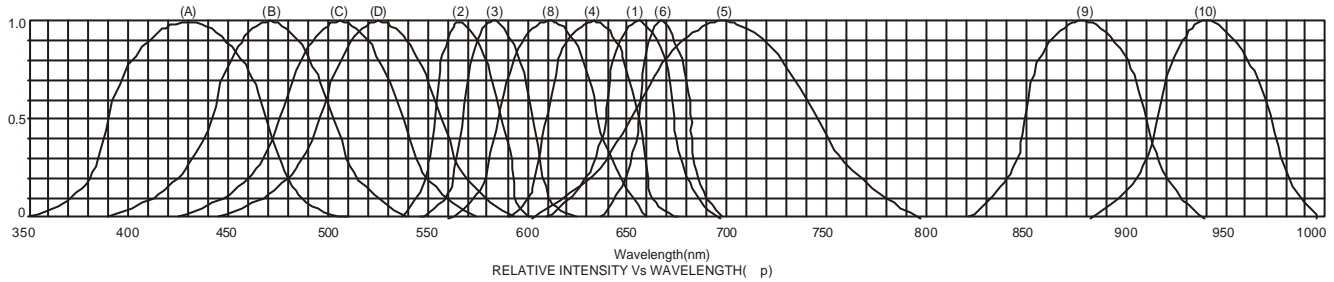
Notes:

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

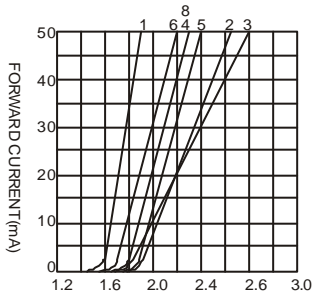
LED NUMERIC DISPLAY, 1 DIGIT

BL-S50X-12XX

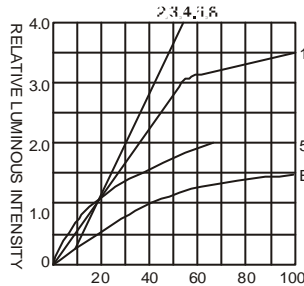
Typical electrical-optical characteristics curves:



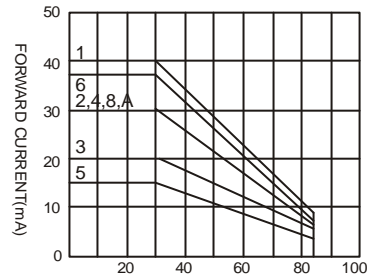
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) -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



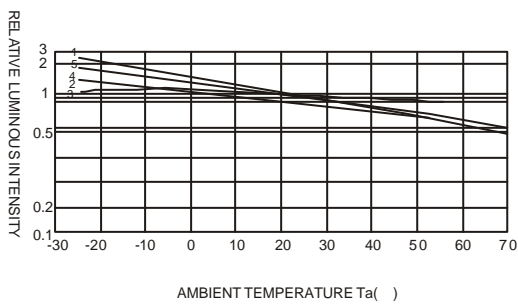
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



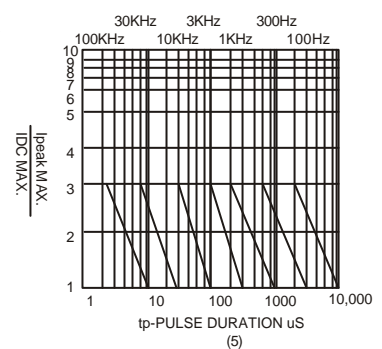
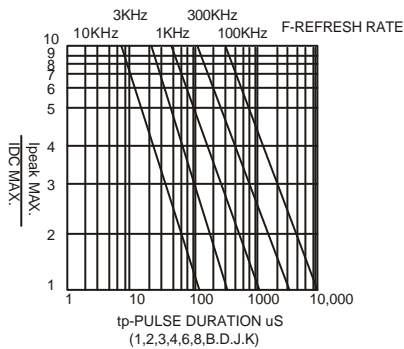
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



AMBIENT TEMPERATURE Ta()
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta()



NOTE:25 free air temperature unless otherwise specified