LED DOT MATRIX

BL-M23X881XX

Features:

- 60.20mm (2.3") Φ5.0 dot matrix LED display, BI-COLOR
- 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
Row Cathode Column Anode	Row Anode Column Cathode	Emitted Color	Material	λ_P (nm)	Typ	Max	TYP.(mcd)
BL-M23E881SG-XX	BL-M23F881SG-XX	Super Red	AlGaInP	660	2.10	2.50	280
		Green	GaP/GaP	570	2.20	2.50	250
BL-M23E881EG-XX	BL-M23F881EG-XX	Red	GaAsP/GaP	635	2.10	2.50	255
		Green	GaP/GaP	570	2.20	2.50	250
BL-M23E881DUG-XX	BL-M23F881DUG-XX	Ultra Red	AlGaInP	660	2.10	2.50	310
		Ultra Green	AlGaInP	574	2.20	2.50	380
BL-M23E881UEUG-X X	BL-M23F881UEUG-X X	Ultra Red	AlGaInP	630	2.10	2.50	255
		Ultra Green	AlGaInP	574	2.20	2.50	380

■ -XX: Surface / Lens color：

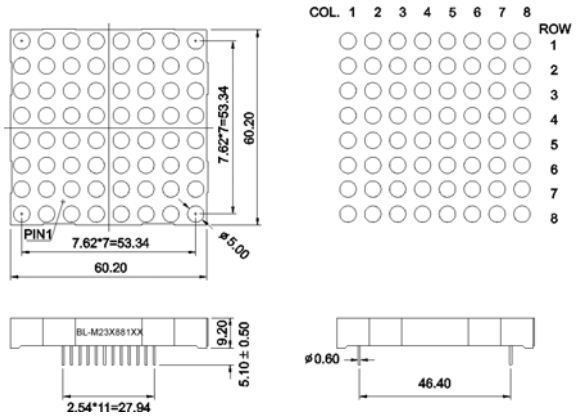
Number	0	1	2	3	4	5
Ref Surface Color	White	Black	Gray	Red	Green	
Epoxy Color	Water clear	White diffused	Red Diffused	Green Diffused	Yellow Diffused	

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

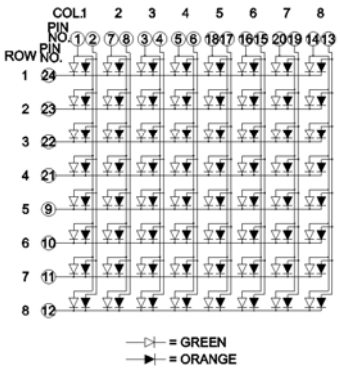
Parameter	S	G	E	D	UG	UE			Unit
Forward Current I_F	30	30	30	30	30	30			mA
Power Dissipation P_d	75	80	80	75	75	65			mW
Reverse Voltage V_R	5	5	5	5	5	5			V
Peak Forward Current I_{PF} (Duty 1/10 @1KHZ)	150	150	150	150	150	150			mA
Operation Temperature T_{OPR}	-40 to +80								° C
Storage Temperature 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

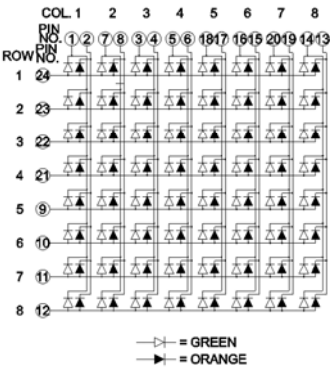
BL-M23X881 Series



BL-M23E881xx

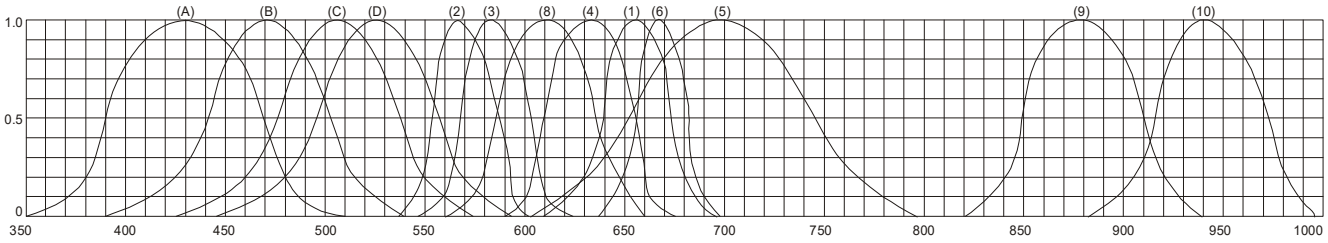


BL-M23F881xx



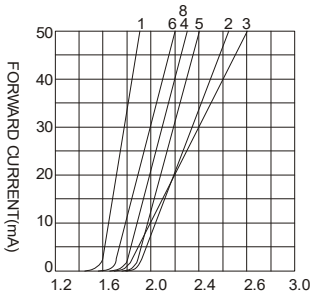
Notes:
1. All dimensions are in millimeters (inches)
2. Tolerance is ±0.25(0.01")unless otherwise noted.
3. Specifications are subject to change without notice.

■ Typical electrical-optical characteristics curves:

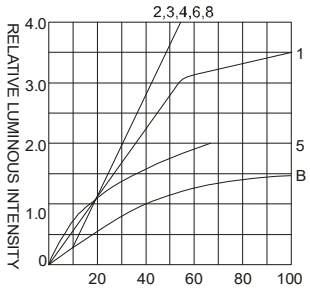


RELATIVE INTENSITY Vs WAVELENGTH(λ p)

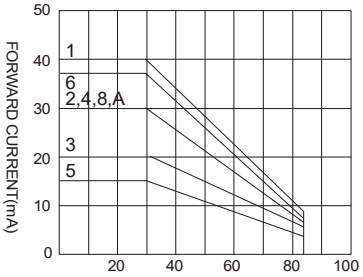
(1) - GaAsP/GaAs 655nm/Red
(2) - GaP 570nm/Yellow Green
(3) - GaAsP/GaP 585nm/Yellow
(4) - GaAsp/GaP 635nm/Orange & Hi-Eff Red
(5) - GaP 700nm/Bright Red
(6) - GaAlAs/GaAs 660nm/Super Red
(8) - GaAsP/GaP 610nm/Super Red
(9) - GaAlAs 880nm
(10) - GaAs/GaAs & GaAlAs/GaAs 940nm
(A) - GaN/SiC 430nm/Blue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



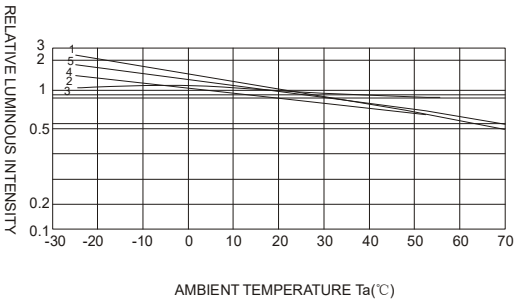
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE

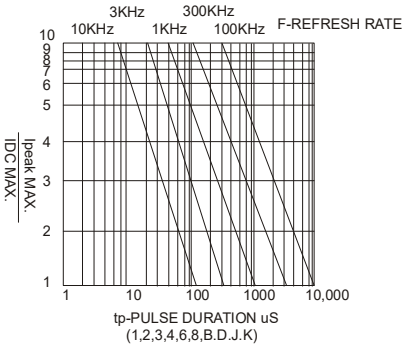


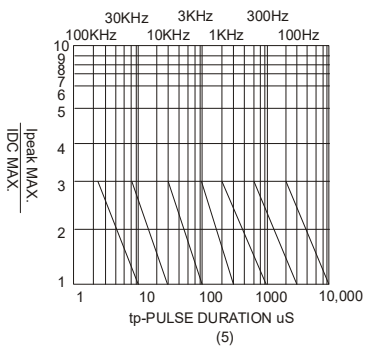
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



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







NOTE:25℃ free air temperature unless otherwise specified

■ Packing and weighting

