

LED DOT MATRIX

BL-ML23X882UED

Features:

- 60.96mm (2.3") LED dot matrix display.5mm Oval Type LED Lamps in dot matrix.
- Low current operation.
- Excellent character appearance.
- Easy mounting on P.C. Boards or sockets.
- I.C. Compatible.
- ROHS Compliance.



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

Part No		Chip			Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:mcd	
		Emit color	Material	λP (nm)	Typ	Max	Min.	Typ.
BL-ML23A882URC	BL-ML23B882URC	Ultra Red	AlGaAs, DDH	660	1.95	2.20	500	750
BL-ML23A882UEC	BL-ML23B882UEC	Ultra Red	AlGaInP	630	2.10	2.50	250	800
BL-ML23A882UYC	BL-ML23B882UYC	Ultra Yellow	AlGaInP	590	2.10	2.50	250	800
BL-ML23A882UGC	BL-ML23B882UGC	Ultra Green	AlGaInP	574	2.20	2.50	100	250
BL-ML23A882PGC	BL-ML23B882PGC	Ultra Pure Green	InGaN	525	3.80	4.50	600	1800
BL-ML23A882UBC	BL-ML23B882UBC	Ultra Blue	InGaN	470	2.70	4.20	600	1500
BL-ML23A882UWC	BL-ML23B882UWC	Ultra White	InGaN	/	2.70	4.20	1000	2300

■ Absolute maximum ratings (Ta=25°C)

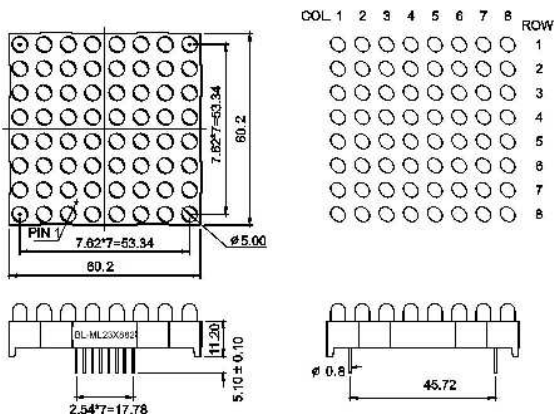
Parameter	UR	UE	UY	UG	PG	UB	W	Unit
Forward Current I _F	25	30	30	30	30	30	30	mA
Power Dissipation P _d	60	65	65	75	110	120	120	mW
Reverse Voltage V _R	5	5	5	5	5	5	5	V
Peak Forward Current I _{PF} (Duty 1/10 @1KHZ)	150	150	150	150	150	100	100	mA
Operation Temperature T _{OPR}	-40 to +80							°C
Storage 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

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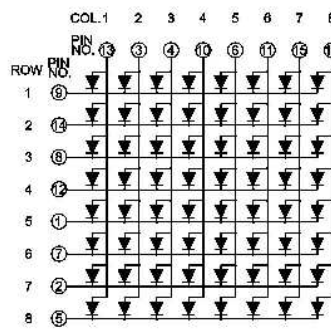
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■ **Package configuration & Internal circuit diagram**

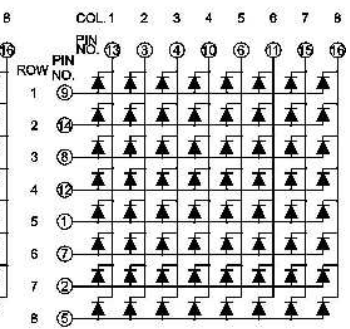
BL-ML23X882 Series



BL-ML23A882



BL-ML23B882



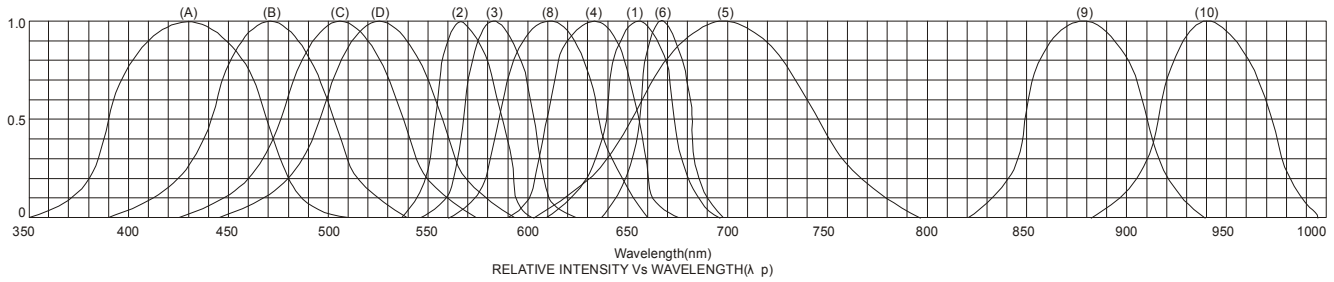
Notes:

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.

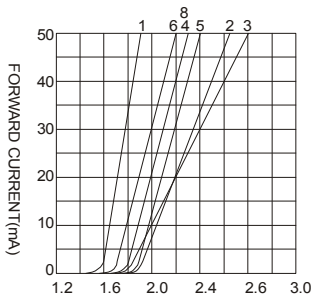
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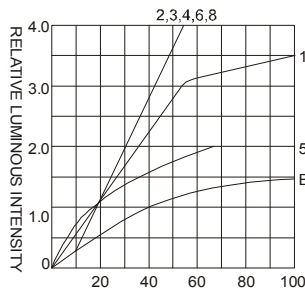
Typical electrical-optical characteristics curves:



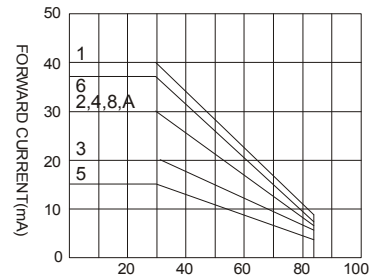
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) -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



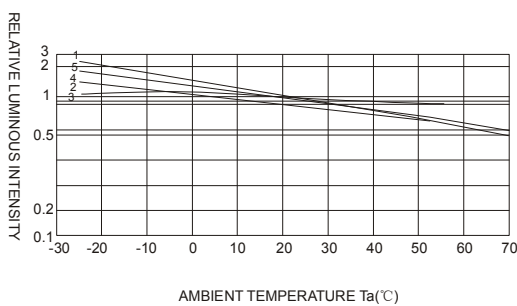
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



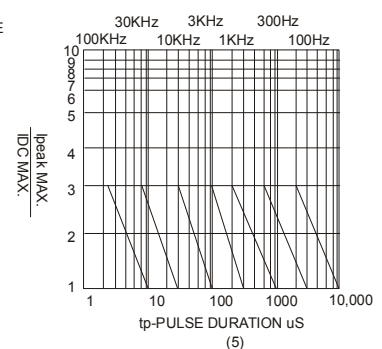
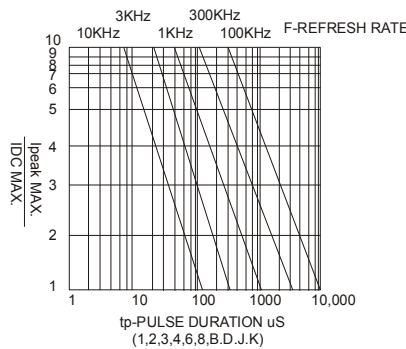
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



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



AMBIENT TEMPERATURE Ta(°C)



NOTE: 25°C free air temperature unless otherwise specified

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■ **Packing and weighting**

