

LED DOT MATRIX,SMD

BL-MS07X882

Features:

- 20.20mm (0.7") Φ 1.9 dot matrix SMD LED display..
- Low current operation.
- Excellent character appearance.
- Easy mounting on P.C. Boards or sockets.
- I.C. Compatible.
- ROHS Compliance.



Super Bright

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-MS07A882S-XX	BL-MS07B882S-XX	Hi Red	GaAlAs/GaAs,SH	660	1.85	2.20	200
BL-MS07A882D-XX	BL-MS07B882D-XX	Super Red	GaAlAs/GaAs,DH	660	1.85	2.20	320
BL-MS07A882UR-XX	BL-MS07B882UR-XX	Ultra Red	GaAlAs/GaAs,DDH	660	1.85	2.20	400
BL-MS07A882E-XX	BL-MS07B882E-XX	Red	GaAsP/GaP	635	2.10	2.50	190
BL-MS07A882Y-XX	BL-MS07B882Y-XX	Yellow	GaAsP/GaP	585	2.10	2.50	190
BL-MS07A882G-XX	BL-MS07B882G-XX	Green	GaP/GaP	570	2.20	2.50	195

Ultra Bright

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-MS07A882UHR-XX	BL-MS07B882UHR-XX	Ultra Red	AlGaN	645	2.10	2.50	400
BL-MS07A882UE-XX	BL-MS07B882UE-XX	Ultra Red	AlGaN	630	2.10	2.50	235
BL-MS07A882YO-XX	BL-MS07B882YO-XX	Ultra Amber	AlGaN	619	2.10	2.50	235
BL-MS07A882UY-XX	BL-MS07B882UY-XX	Ultra Yellow	AlGaN	590	2.10	2.50	235
BL-MS07A882UG-XX	BL-MS07B882UG-XX	Ultra Green	AlGaN	574	2.20	2.50	250
BL-MS07A882PG-XX	BL-MS07B882PG-XX	Ultra Pure Green	InGaN	525	3.10	4.20	270
BL-MS07A882B-XX	BL-MS07B882B-XX	Ultra Blue	InGaN	470	3.10	4.20	180
BL-MS07A882W-XX	BL-MS07B882W-XX	Ultra White	InGaN	/	3.10	4.20	280

-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	

LED DOT MATRIX,SMD
BL-MS07X882
■ Absolute maximum ratings (Ta=25°C)

Parameter	S	D	UR	E	Y	G	Unit
Forward Current I_F	25	25	25	25	25	30	mA
Power Dissipation P_d	60	60	60	60	60	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

■ Absolute maximum ratings (Ta=25°C)

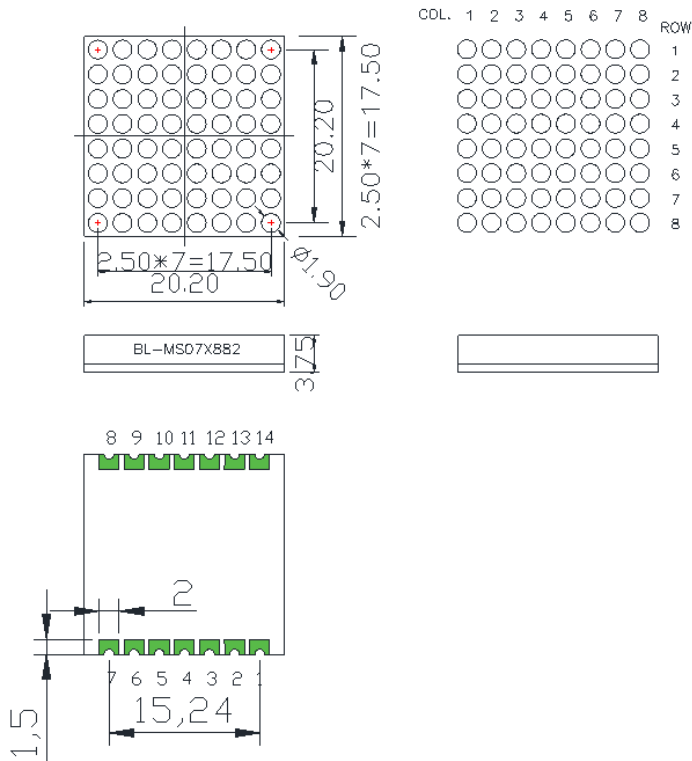
Parameter	UHR	UE	YO	UY	UG	PG	B	W	Unit
Forward Current I_F	30	30	30	30	30	30	30	30	mA
Power Dissipation P_d	75	65	65	65	75	110	120	120	mW
Reverse Voltage V_R	5	5	5	5	5	5	5	5	V
Peak Forward Current I_{PF} (Duty 1/10 @1KHZ)	150	150	150	150	150	150	100	100	mA
Operation Temperature T_{OPR}	-40 to +80								°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

LED DOT MATRIX,SMD

BL-MS07X882

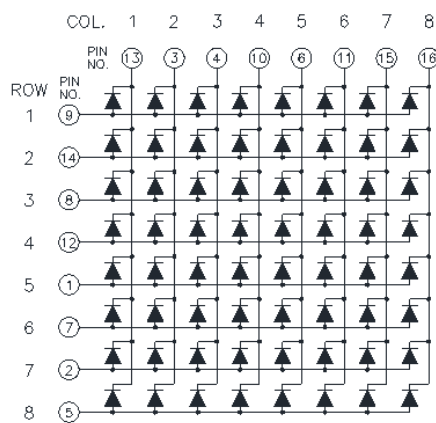
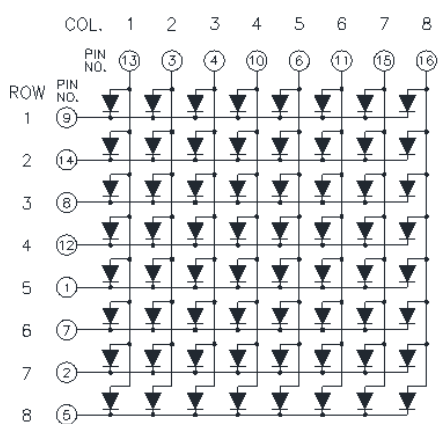
Package configuration & Internal circuit diagram

BL-MS07X882 Series



BL-MS07A882

BL-MS07B882



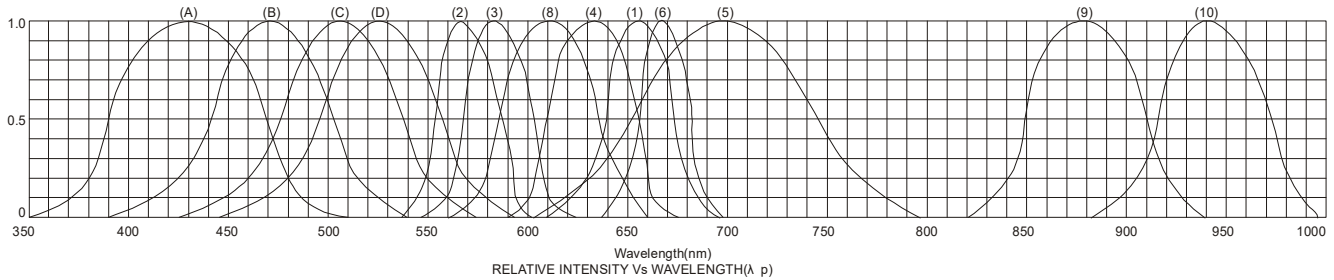
Notes:

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.

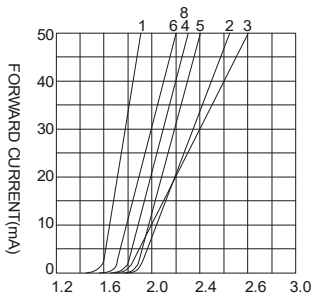
LED DOT MATRIX,SMD

BL-MS07X882

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



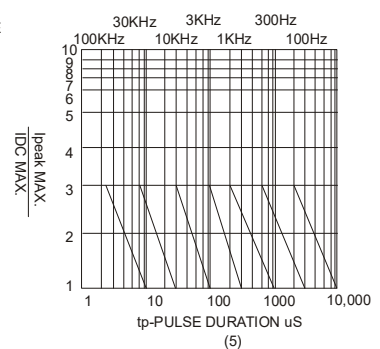
AMBIENT TEMPERATURE Ta(°C)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta(°C)



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



(5)

NOTE:25°C free air temperature unless otherwise specified

LED DOT MATRIX,SMD

BL-MS07X882

■ **Packing and weighting**

