

**LED DOT MATRIX**
**BL-M40X571XX**
**Features:**

- 106.50mm (4.0") F10.0 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.


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

Part No		Chip			VF Unit:V		Iv TYP.(mcd)
Row Cathode Column Anode	Row Anode Column Cathode	Emitted Color	Material	λp (nm)	Typ	Max	
BL-M40A571SG-XX	BL-M40B571SG-XX	Super Red	AlGaInP	660	2.10	2.50	155
		Green	GaP/GaP	570	2.20	2.50	140
BL-M40A571EG-XX	BL-M40B571EG-XX	Orange	GaAsP/GaP	635	2.10	2.50	120
		Green	GaP/GaP	570	2.20	2.50	140
BL-M40A571DUG-X X	BL-M40B571DUG-X X	Ultra Red	AlGaInP	660	2.10	2.50	180
		Ultra Green	AlGaInP	574	2.20	2.50	200
BL-M40A571UEUG- XX	BL-M40B571UEUG- XX	Ultra Orange	AlGaInP	630	2.10	2.50	170
		Ultra Green	AlGaInP	574	2.20	2.50	200

**-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)**

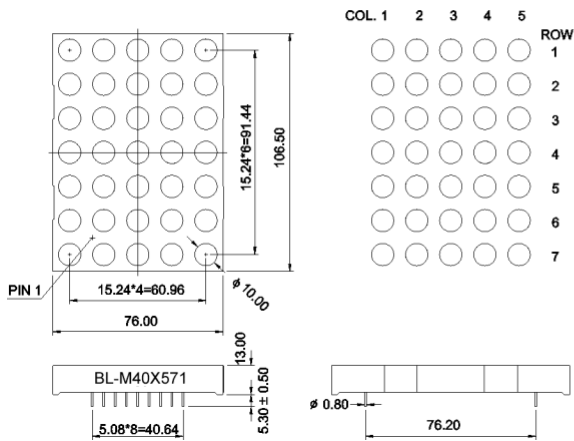
Parameter	S	G	E	D	UG	UE		Unit
Forward Current I <sub>F</sub>	30	30	30	30	30	30		mA
Power Dissipation P <sub>d</sub>	75	80	80	75	75	65		mW
Reverse Voltage V <sub>R</sub>	5	5	5	5	5	5		V
Peak Forward Current I <sub>PF</sub> (Duty 1/10 @1KHZ)	150	150	150	150	150	150		mA
Operation Temperature T <sub>OPR</sub>	-40 to +80							
Storage Temperature T <sub>STG</sub>	-40 to +85							
Lead Soldering Temperature T <sub>SOL</sub>	Max.260±5 for 3 sec Max. (1.6mm from the base of the epoxy bulb)							

**LED DOT MATRIX**

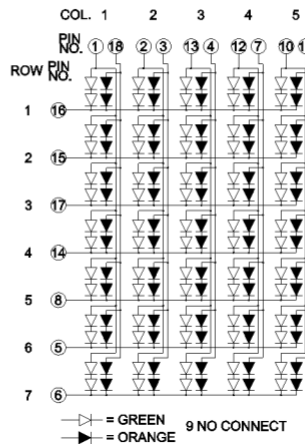
**BL-M40X571XX**

**Package configuration & Internal circuit diagram**

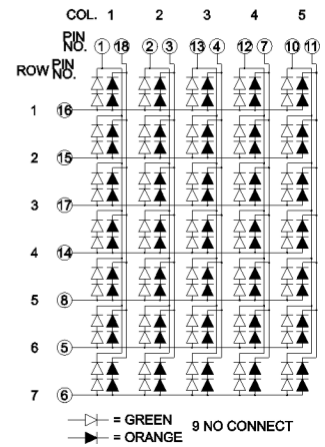
**BL-M40X571 Series**



**BL-M40A571xx**



**BL-M40B571xx**



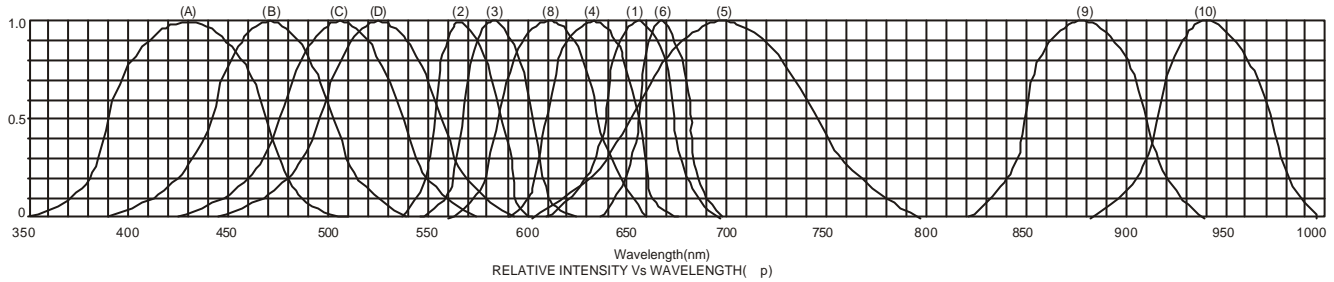
**Notes:**

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.

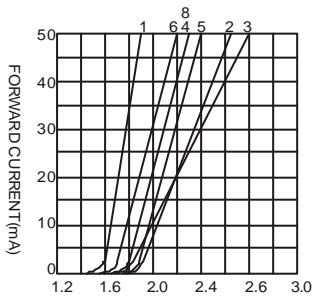
## LED DOT MATRIX

BL-M40X571XX

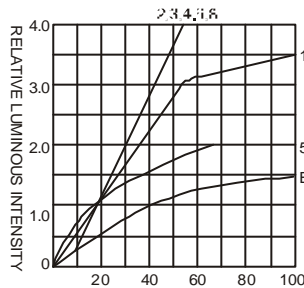
### Typical electrical-optical characteristics curves:



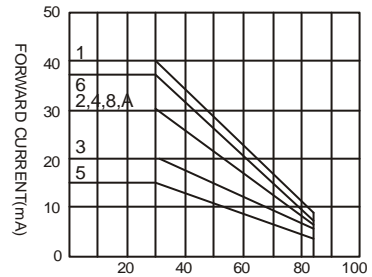
- |   |                                      |
|---|--------------------------------------|
| (1) - GaAsP/GaAs 655nm/Red                | (9) - GaAlAs 880nm                   |
| (2) - GaP 570nm/Yellow Green              | (10) - GaAs/GaAs & GaAlAs/GaAs 940nm |
| (3) - GaAsP/GaP 585nm/Yellow        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



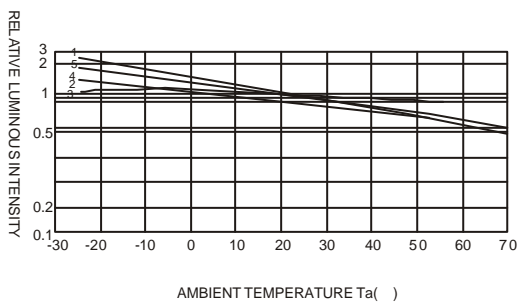
FORWARD VOLTAGE (Vf)  
FORWARD CURRENT VS.  
FORWARD VOLTAGE



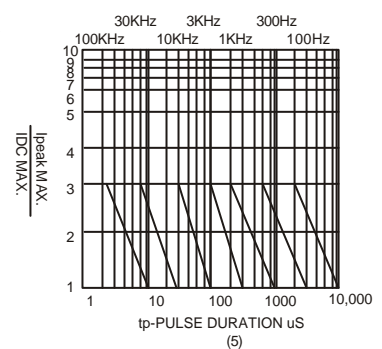
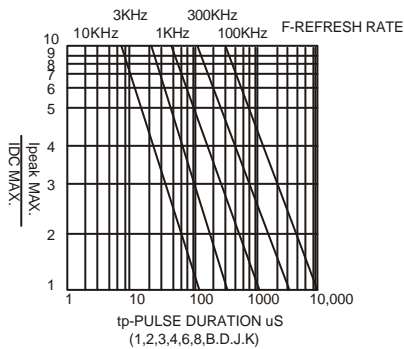
FORWARD CURRENT (mA)  
RELATIVE LUMINOUS  
INTENSITY VS. FORWARD  
CURRENT



AMBIENT TEMPERATURE Ta( )  
FORWARD CURRENT VS. AMBIENT  
TEMPERATURE



AMBIENT TEMPERATURE Ta( )



NOTE:25 free air temperature unless otherwise specified