

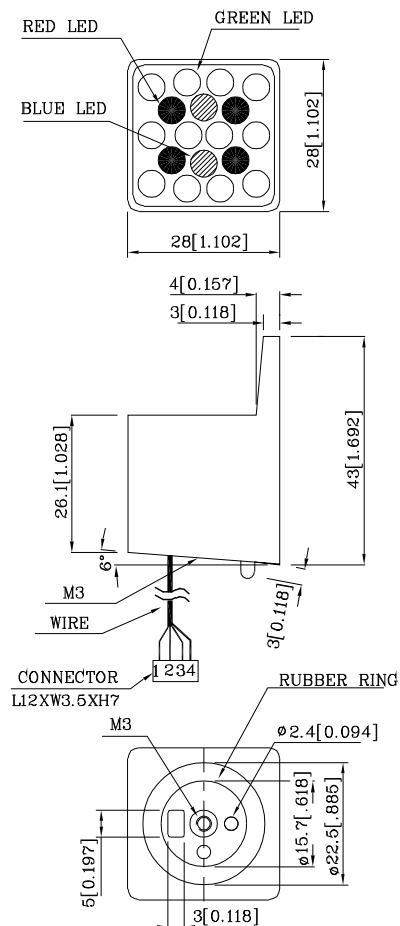
## 28mmX28mm LED CLUSTER

### Features

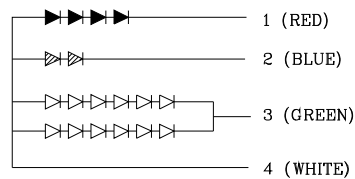
- HIGH VISIBILITY.
- WATER PROOF PACKAGE WITH HOOD SUITABLE FOR OUTDOOR AND INDOOR INFORMATION BOARDS.
- CAN PRODUCE ANY COLOR IN VISIBLE SPECTRUM, INCLUDING WHITE LIGHT.
- RoHS COMPLIANT.



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE



RED LED X 4pcs  
BLUE LED X 2pcs  
GREEN LED X 12pcs



#### Notes:

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

**28mmX28mm LED CLUSTER**

**Electrical / Optical Characteristics at TA=25°C**

Symbol	Parameter	Device	Type.	Min	Typ.	Max.	Units	Test Conditions
Iv	Luminous Intensity	XK4MR2BB12MGW78	MR	900	1790	-	mcd	IF=20mA
			BB	280	647	-		IF=20mA
			MG	650	1195	-		IF=40mA
2q1/2	Viewing Angle		-	-	40	-	deg	-
VF	Forward Voltage		MR	-	7.4	10	V	IF=20mA
			BB	-	7.3	8.4		IF=20mA
			MG	-	13.2	15		IF=40mA
lpeak	Peak Wavelength		MR	-	660	-	nm	IF=20mA
			BB	-	468	-		IF=20mA
			MG	-	565	-		IF=40mA
ID	Dominant Wavelength		MR	-	640	-	nm	IF=20mA
			BB	-	470	-		IF=20mA
			MG	-	568	-		IF=40mA
D11/2	Spectral Line Half-width		MR	-	20	-	nm	IF=20mA
			BB	-	25	-		IF=20mA
			MG	-	30	-		IF=40mA
IR	Reverse Current		-	-	-	40	uA	VR = 5V

**Absolute Maximum Ratings at TA=25°C**

Parameter	Value			Units
	MR	BB	MG	
Total Power dissipation	1200			mW
DC Forward Current	30	25	25	mA
Reverse Voltage	5			V
Operating Temperature	-40°C To +70°C			
Storage Temperature	-40°C To +85°C			