

**DESCRIPTION:**

The KWM-50881XY series is 50.70mm (1.996") height 8 x 8 multi-color dot matrix display.  
 This multi-color series is suitable for use in single/multi-line message display, large area graphics display and electronic games.  
 All devices are available as either common row anode or common row cathode.

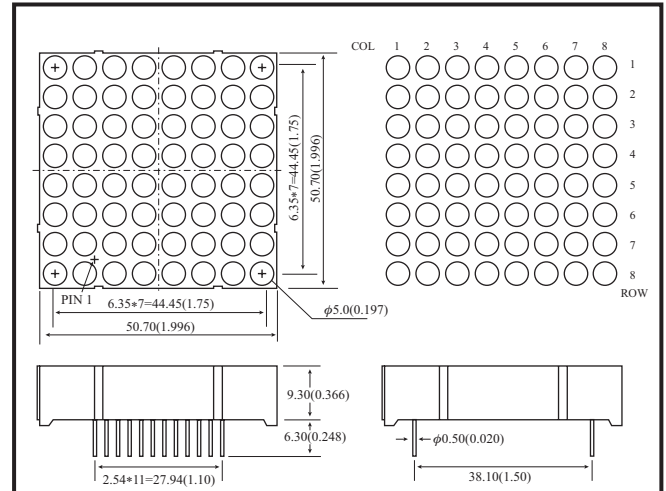
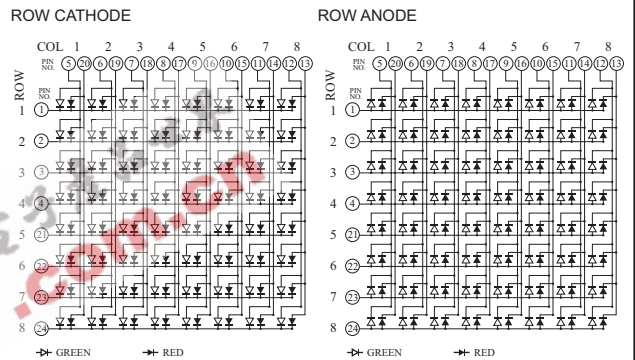
**ABSOLUTE MAXIMUM RATINGS: (Ta=25°C)**

Parameter	Max
Reverse Voltage per segment	5 V
Reverse Current per segment (Vr = 5V)	100µA
Derating Linear from 25°C per segment	0.4mA/°C
Operating Temperature Range	-40°C To 85°C
Storage Temperature Range	-40°C To 100°C
Soldering Temperature 1.6mm(1/16") from body for 5 sec. at 260°C	

- NOTES : 1. All dimensions are in millimeters (inches).  
 2. Tolerance is ±0.25mm(0.010) unless otherwise specified.  
 3. Specifications are subject to change without notice.  
 4. NP: No Pin.  
 5. NC: No Connect.

**TESTING CONDITION FOR EACH PARAMETER :**

Parameter	Symbol	Unit	Test Condition
Forward Voltage	Vf	V	If=20mA
Peak Emission Wave Length	λp	nm	If=20mA
Spectral Line Half-Width	Δλ	nm	If=20mA
Reverse Current	Ir	µA	Vr=5V
Average Luminous Intensity	Iv	µ cd	If=10mA

**PACKAGE DIMENSIONS**

**INTERNAL CIRCUIT DIAGRAM**

**PART NO. SELECTION AND APPLICATION INFORMATION (RATINGS AT 25°C AMBIENT)**

Part No.	Chip		C.C or C.A	Wave Length λp (nm)	Absolute Maximum Ratings				Electro-optical Characteristic						
	Raw Material	Emitted Color			Δλ (nm)	Pd (mW)	If (mA)	If (Peak) (mA)	Vf (V) Per Dot			If (Rec) (mA)	Iv (µcd) Per Dot		
									Min.	Typ.	Max.		Min.	Typ.	
KWM-50881A32	GaAsP/GaP	Hi-Eff Red	Common Anode	635	45	100	50	100	1.7	1.9	2.6	10-20	900	1800	
	GaP	Green		565	30	100	50	100	1.7	2.2	2.6	10-20	800	1700	
KWM-50881ASG	GaAlAs	Super Red		660	20	100	50	100	1.5	1.9	2.6	10-20	1600	3000	
	GaP	Super Green		570	30	100	50	100	1.7	2.2	2.6	10-20	850	1850	
KWM-50881A26	GaAsP/GaP	Yellow		585	30	100	50	100	1.7	1.9	2.6	10-20	800	1700	
	GaP	Green		565	30	100	50	100	1.7	2.2	2.6	10-20	800	1700	
KWM-50881C32	GaAsP/GaP	Hi-Eff Red		Common Cathode	635	45	100	50	100	1.7	1.9	2.6	10-20	900	1800
	GaP	Green			565	30	100	50	100	1.7	2.2	2.6	10-20	800	1700
KWM-50881CSG	GaAlAs	Super Red	660		20	100	50	100	1.5	1.9	2.6	10-20	1600	3000	
	GaP	Super Green	570		30	100	50	100	1.7	2.2	2.6	10-20	850	1850	
KWM-50881C26	GaAsP/GaP	Yellow	585		30	100	50	100	1.7	1.9	2.6	10-20	800	1700	
	GaP	Green	565		30	100	50	100	1.7	2.2	2.6	10-20	800	1700	

- REMARKS : 1. The average luminous intensity is obtained by summing the luminous intensity of each segment and dividing by the total number of segments.  
 2. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (International Commission on Illumination) eye-response curve.  
 3. Clean only by pure water, isopropanol, ethanol, Freon TF (or equivalent).