

DESCRIPTION:

The KWM-50881 series is 50.70mm (1.996") height 8 x 8 dot matrix display. This 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)

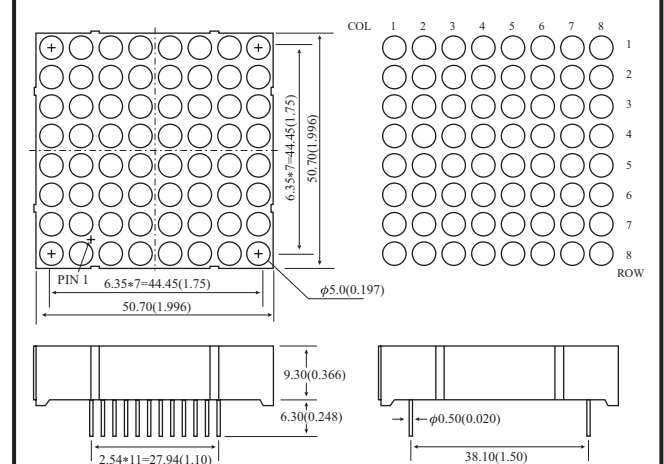
Parameter	Max
Reverse Voltage per segment	5 V
Reverse Current per segment (Vr = 5V)	100μA
Derating Linear from 25°C per segment	0.4mA/°C
Operating Temperature Range	-40°C To 85°C
Storage Temperature Range	-40°C To 100°C
Soldering Temperature 1.6mm(1/16") from body for 5 sec. at 260°C	

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 :

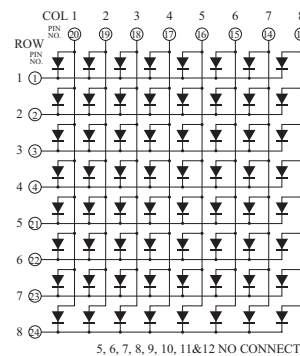
Parameter	Symbol	Unit	Test Condition
Forward Voltage	Vf	V	If=20mA
Peak Emission Wave Length	λp	nm	If=20mA
Spectral Line Half-Width	Δλ	nm	If=20mA
Reverse Current	Ir	μA	Vr=5V
Average Luminous Intensity	Iv	μ cd	If=10mA

PACKAGE DIMENSIONS

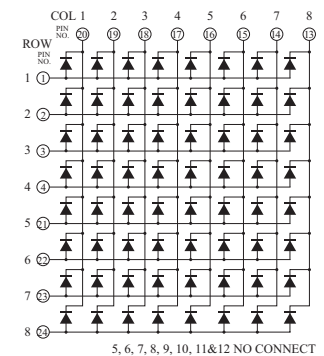


INTERNAL CIRCUIT DIAGRAM

ROW CATHODE



ROW ANODE



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

Part No.	Chip		C.C or C.A	Wave Length λ_p (nm)	Absolute Maximum Ratings				Electro-optical Characteristic					
	Raw Material	Emitted Color			$\Delta\lambda$ (nm)	Pd (mW)	If (mA)	If (Peak) (mA)	Vf (V) Per Dot			If (Rec) mA	Iv (μ cd) Per Dot	
									Min.	Typ.	Max.		Min.	Typ.
KWM-50881A5	GaP	Bright Red	Common Anode	700	90	100	50	100	1.7	2.4	2.8	10-20	450	950
KWM-50881A3	GaAsP/GaP	Hi-Eff Red		635	45	100	50	100	1.7	1.9	2.6	10-20	900	1800
KWM-50881AS	GaAlAs	Super Red		660	20	100	50	100	1.5	1.9	2.6	10-20	1600	3000
KWM-50881A2	GaP	Green		565	30	100	50	100	1.7	2.2	2.6	10-20	800	1700
KWM-50881AG	GaP	Super Green		570	30	100	50	100	1.7	2.2	2.6	10-20	850	1850
KWM-50881A6	GaAsP/GaP	Yellow		585	30	100	50	100	1.7	1.9	2.6	10-20	800	1700
KWM-50881C5	GaP	Bright Red	Common Cathode	700	90	100	50	100	1.7	2.4	2.8	10-20	450	950
KWM-50881C3	GaAsP/GaP	Hi-Eff Red		635	45	100	50	100	1.7	1.9	2.6	10-20	900	1800
KWM-50881CS	GaAlAs	Super Red		660	20	100	50	100	1.5	1.9	2.6	10-20	1600	3000
KWM-50881C2	GaP	Green		565	30	100	50	100	1.7	2.2	2.6	10-20	800	1700
KWM-50881CG	GaP	Super Green		570	30	100	50	100	1.7	2.2	2.6	10-20	850	1850
KWM-50881C6	GaAsP/GaP	Yellow		585	30	100	50	100	1.7	1.9	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).