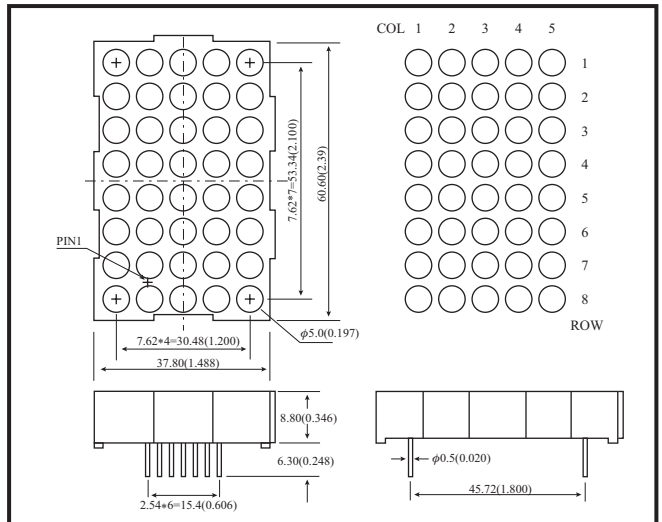
LUCKY LIGHT

KWM-50581 SERIES
5 x 8 Dot Matrix (5.0mm Dot)
LED Display

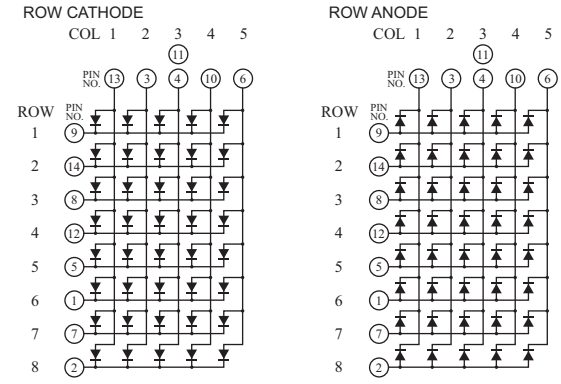
DESCRIPTION:

The KWM-50581 series is 60.60mm (2.39") height 5 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.

PACKAGE DIMENSIONS



INTERNAL CIRCUIT DIAGRAM



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	λρ	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

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

Part No.	Chip		C.C or C.A	Wave Length λρ (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-50581A5	GaP	Bright Red	Common Anode	700	90	100	50	100	1.7	2.4	2.8	10-20	450	950
KWM-50581A3	GaAsP/GaP	Hi-Eff Red		635	45	100	50	100	1.7	1.9	2.6	10-20	900	1800
KWM-50581AS	GaAlAs	Super Red		660	20	100	50	100	1.5	1.9	2.6	10-20	1600	3000
KWM-50581A2	GaP	Green		565	30	100	50	100	1.7	2.2	2.6	10-20	800	1700
KWM-50581AG	GaP	Super Green		570	30	100	50	100	1.7	2.2	2.6	10-20	850	1850
KWM-50581A6	GaAsP/GaP	Yellow		585	30	100	50	100	1.7	1.9	2.6	10-20	800	1700
KWM-50581C5	GaP	Bright Red	Common Cathode	700	90	100	50	100	1.7	2.4	2.8	10-20	450	950
KWM-50581C3	GaAsP/GaP	Hi-Eff Red		635	45	100	50	100	1.7	1.9	2.6	10-20	900	1800
KWM-50581CS	GaAlAs	Super Red		660	20	100	50	100	1.5	1.9	2.6	10-20	1600	3000
KWM-50581C2	GaP	Green		565	30	100	50	100	1.7	2.2	2.6	10-20	800	1700
KWM-50581CG	GaP	Super Green		570	30	100	50	100	1.7	2.2	2.6	10-20	850	1850
KWM-50581C6	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).