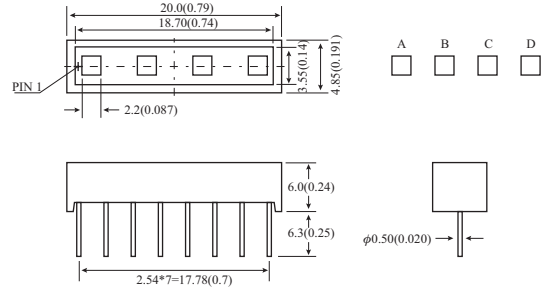


DESCRIPTION:

The KWL-401Ux series is 4.85mm x 20.00mm four-element bar graph display. The device has separate anode and cathode for each light segment and is available in 6 different colors.

PACKAGE DIMENSIONS

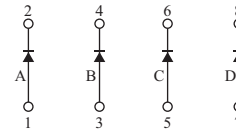


ABSOLUTE MAXIMUM RATINGS: (Ta=25°C)

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.

INTERNAL CIRCUIT DIAGRAM



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

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 Chip			If (Rec) (mA)	Iv (μcd) Per Chip	
									Min.	Typ.	Max.		Min.	Typ.
KWL-401U5	GaP	Bright Red	No Common Polar	700	90	100	50	100	1.7	2.4	2.8	10-20	300	550
KWL-401U3	GaAsP/GaP	Hi-Eff. Red		635	45	100	50	100	1.7	1.9	2.6	10-20	700	1800
KWL-401US	GaAlAs	Super Red		660	20	100	50	100	1.5	1.9	2.6	10-20	1500	5000
KWL-401U2	GaP	Green		565	30	100	50	100	1.7	2.2	2.6	10-20	700	1600
KWL-401UG	GaP	Super Green		570	30	100	50	100	1.7	2.2	2.6	10-20	850	1900
KWL-401U6	GaAsP/GaP	Yellow		585	30	100	50	100	1.7	1.9	2.6	10-20	600	1500

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).