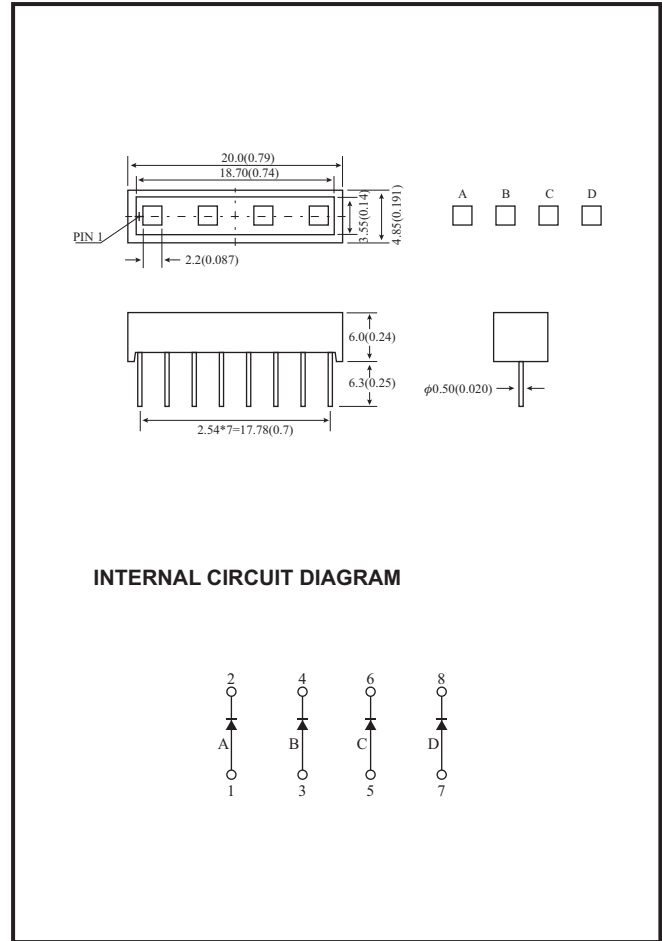


DESCRIPTION:

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)	100 μ A
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 $\pm 0.25\text{mm}(0.010)$ 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	λ_p	nm	If=20mA
Spectral Line Half-Width	$\Delta\lambda$	nm	If=20mA
Reverse Current	Ir	μ A	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 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 Chip			If (Rec) (mA)	Iv (μ cd) 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).