

DESCRIPTION:

The KW1-1801 series is large single digit display in 1.80 inch (45.00mm) height with right DP designed for accurate readable displays need to be viewed over a distance.

This series is suitable for use in instruments, digital readout displays.

All devices are available as either common anode or common cathode.

ABSOLUTE MAXIMUM RATINGS: (Ta=25°C)

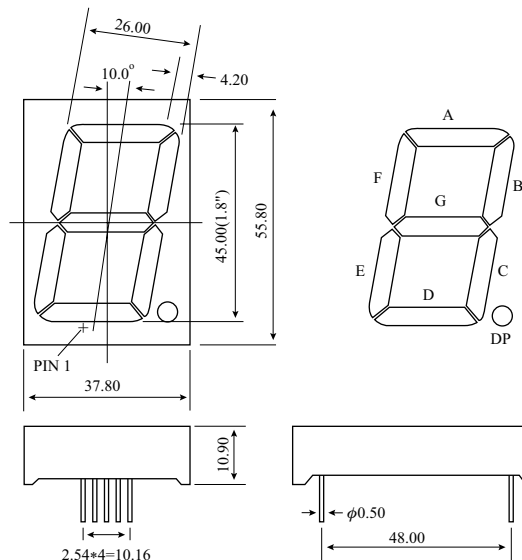
Parameter	Max
Reverse Voltage per segment	5 V
Reverse Current per segment (Vr = 5V)	100μA
Derating Linear from 25°C per segment	0.4mA/°C
Operating Temperature Range	-40°C To 85°C
Storage Temperature Range	-40°C To 100°C
Soldering Temperature 1.6mm(1/16") from body for 5 sec. at 260°C	

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

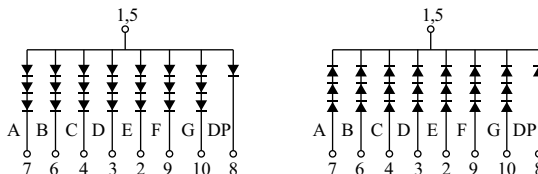
TESTING CONDITION FOR EACH PARAMETER :

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	μA	Vr=5V
Average Luminous Intensity	Iv	μcd	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 λ_p (nm)	Absolute Maximum Ratings				Electro-optical Data(at 10mA)					
	Raw Material	Emitted Color			$\Delta\lambda$ (nm)	Pd (mW)	If (mA)	If (Peak) (mA)	Vf (V) Per Segment			If (Rec) mA	Iv (μ cd) Per Segment	
									Min.	Typ.	Max.		Min.	Typ.
KW1-1801A3	GaAsP/GaP	Hi-Eff. Red	Common Anode	635	45	100	50	100	5.1	6.0	8.4	10-20	1800	5600
KW1-1801AS	GaAlAs	Super Red		660	20	100	50	100	4.8	5.4	6.3	10-20	10000	40000
KW1-1801A2	GaP	Green		565	30	100	50	100	5.1	6.3	8.4	10-20	1600	5200
KW1-1801AG	GaP	Super Green		570	30	100	50	100	5.1	6.3	8.4	10-20	1800	5500
KW1-1801A6	GaAsP/GaP	Yellow		585	30	100	50	100	5.1	6.3	8.4	10-20	1600	5200
KW1-1801C3	GaAsP/GaP	Hi-Eff Red	Common Cathode	635	45	100	50	100	5.1	6.0	8.4	10-20	1800	5600
KW1-1801CS	GaAlAs	Super Red		660	20	100	50	100	4.8	5.4	6.3	10-20	10000	40000
KW1-1801C2	GaP	Green		565	30	100	50	100	5.1	6.3	8.4	10-20	1600	5200
KW1-1801CG	GaP	Super Green		570	30	100	50	100	5.1	6.3	8.4	10-20	1800	5500
KW1-1801C6	GaAsP/GaP	Yellow		585	30	100	50	100	5.1	6.3	8.4	10-20	1600	5200

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).