

# KW1-1801AOB

## DATA SHEET

QC:

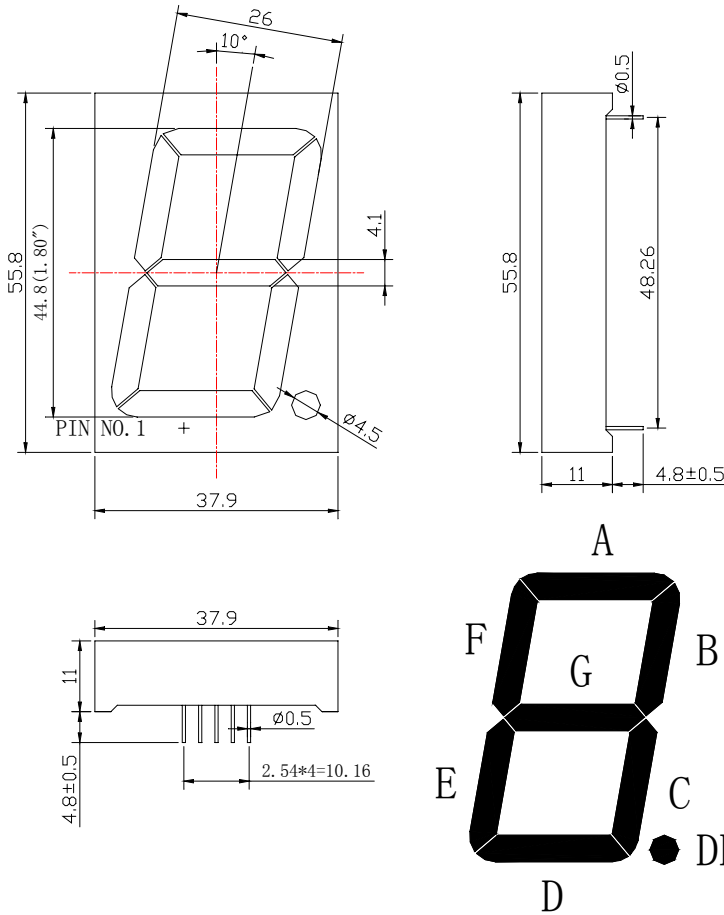
ENG:

Prepared By:

## Features

- ◆ 1.80" Single Digit Super Red
- ◆ Common Anode (Common PIN 1 And PIN 5)
- ◆ Black Face , White Segment

## Package Dimension:



1. COMMON ANODE
2. CATHODE E
3. CATHODE D
4. CATHODE C
5. COMMON ANODE
6. CATHODE B
7. CATHODE A
8. CATHODE DP
9. CATHODE F
10. CATHODE G

Part NO.	Face Color	Source Color
KW1-1801AOB	Black	Orange

## Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25$  (.010") mm unless otherwise noted.
3. Protruded resin under flange is 1.0mm (.04") max
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice

**Absolute Maximum Ratings at Ta=25°C**

Parameter	MAX.	Unit
Power Dissipation	100	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	50	mA
Derating Linear From 50°C	0.4	mA/°C
Reverse Voltage	5	V
Operating Temperature Range	-40°C to +80°C	
Storage Temperature Range	-40°C to +80°C	
Lead Soldering Temperature [4mm(.157") From Body]	260°C for 5 Seconds	

**Electrical Optical Characteristics at Ta=25°C**

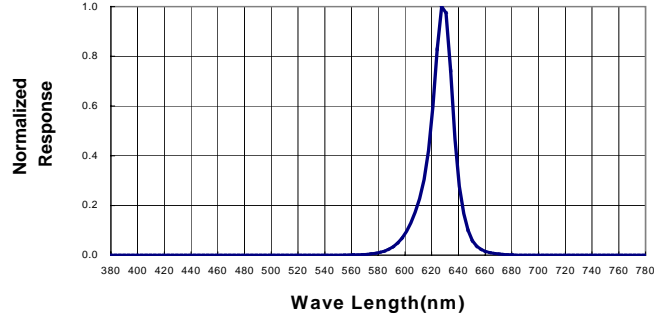
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I <sub>v</sub>	5.0	6.0	---	mcd	I <sub>F</sub> =20mA (Note 1)
Viewing Angle	2θ <sub>1/2</sub>	---	---	---	Deg	(Note 2)
Peak Emission Wavelength	λ <sub>p</sub>	627	632	637	nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>	617	622	627	nm	I <sub>F</sub> =20mA (Note 3)
Spectral Line Half-Width	Δλ	15	20	25	nm	I <sub>F</sub> =20mA
Forward Voltage	V <sub>F</sub>	---	6.0	8.4	V	I <sub>F</sub> =20mA
Reverse Current	I <sub>R</sub>	---	---	100	μA	V <sub>R</sub> =5V

**Note:**

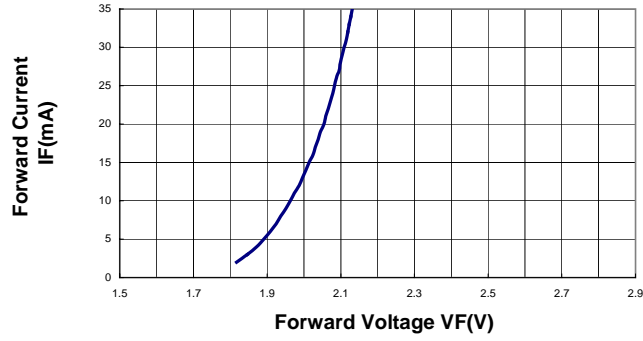
- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- θ<sub>1/2</sub> is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- The dominant wavelength (λ<sub>d</sub>) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

Typical Electrical / Optical Characteristics Curves  
 (25°C Ambient Temperature Unless Otherwise Noted)

**Spectral Radiance (Peak @ 632nm)**



**Forward Current vs Forward Voltage**



**Relative Luminous Intensity vs Forward Current**

