

KW1-311ASB

DATA SHEET

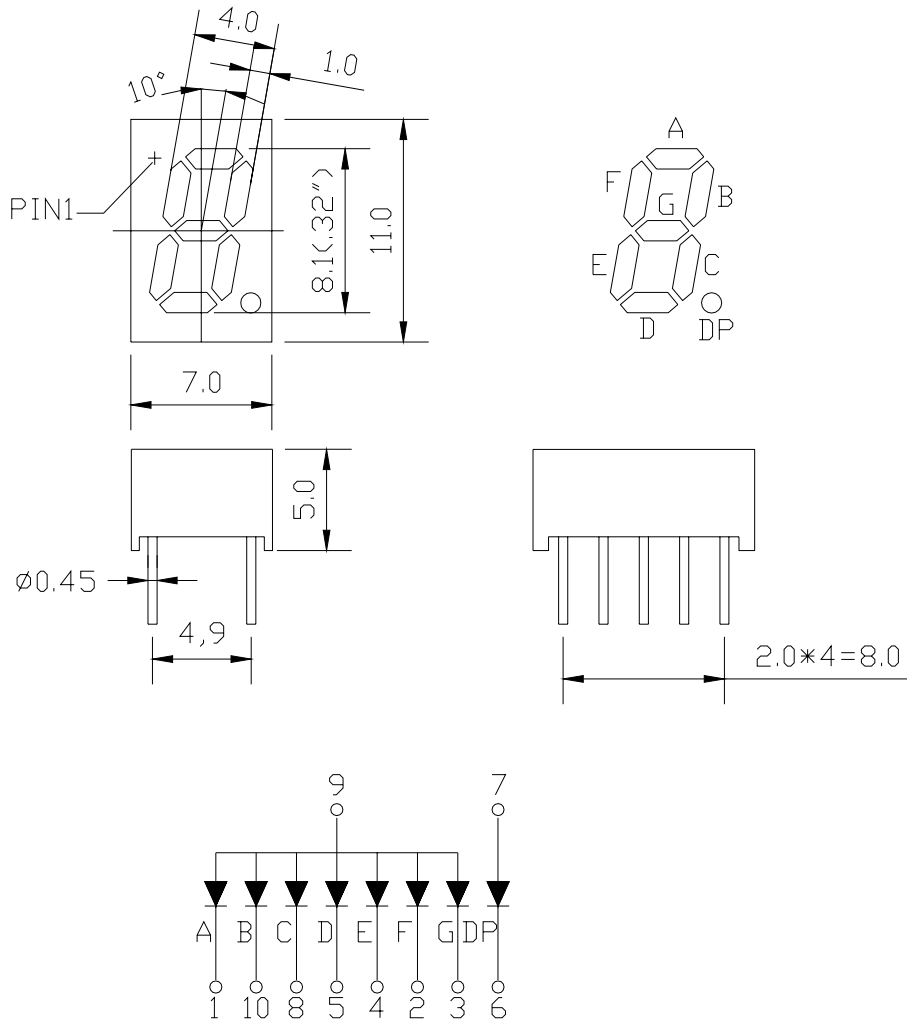
QC:

ENG:

Prepared By:

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| Part No. | KW1-311ASB | Spec No. | S/N-050309020D | Page | 1 of 4 |
|----------|------------|----------|----------------|------|--------|

Package Dimensions:



| Part NO. | Chip Material | Source Color |
|------------|---------------|--------------|
| KW1-311ASB | AlGaAs | Super Red |

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 mm (.010") unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings at Ta=25

| Parameter | MAX. | Unit |
|--|-------------------|------|
| Power Dissipation | 100 | mW |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) | 100 | mA |
| Continuous Forward Current | 40 | mA |
| Derating Linear From 50 | 0.4 | mA/ |
| Reverse Voltage | 5 | V |
| Operating Temperature Range | -40 to +80 | |
| Storage Temperature Range | -40 to +80 | |
| Lead Soldering Temperature [1.6mm(.063") From Body] | 260 for 5 Seconds | |

Electrical Optical Characteristics at Ta=25

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Test Condition |
|--------------------------|--------|------|------|------|---------------|----------------------------|
| Luminous Intensity | I_v | 7 | 15 | 32 | mcd | $I_f=20\text{mA}$ (Note 1) |
| Peak Emission Wavelength | ρ | 655 | 660 | 665 | nm | $I_f=20\text{mA}$ |
| Spectral Line Half-Width | | 19 | 24 | 29 | nm | $I_f=20\text{mA}$ |
| Forward Voltage | V_f | 1.6 | 1.85 | 2.4 | V | $I_f=20\text{mA}$ |
| Reverse Current | I_R | --- | --- | 100 | μA | $V_R=5\text{V}$ |

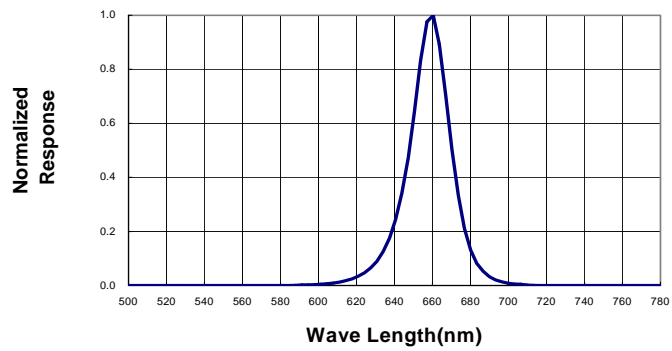
Notes:

1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

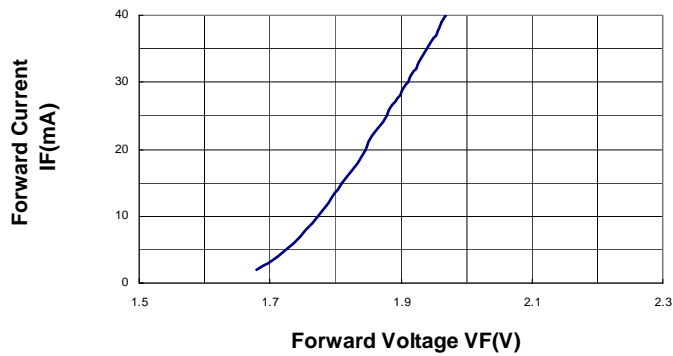
Typical Electrical / Optical Characteristics Curves

(25 Ambient Temperature Unless Otherwise Noted)

Spectral Radiance (Peak @ 660nm)



Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current

