

KW1-311CSB

DATA SHEET

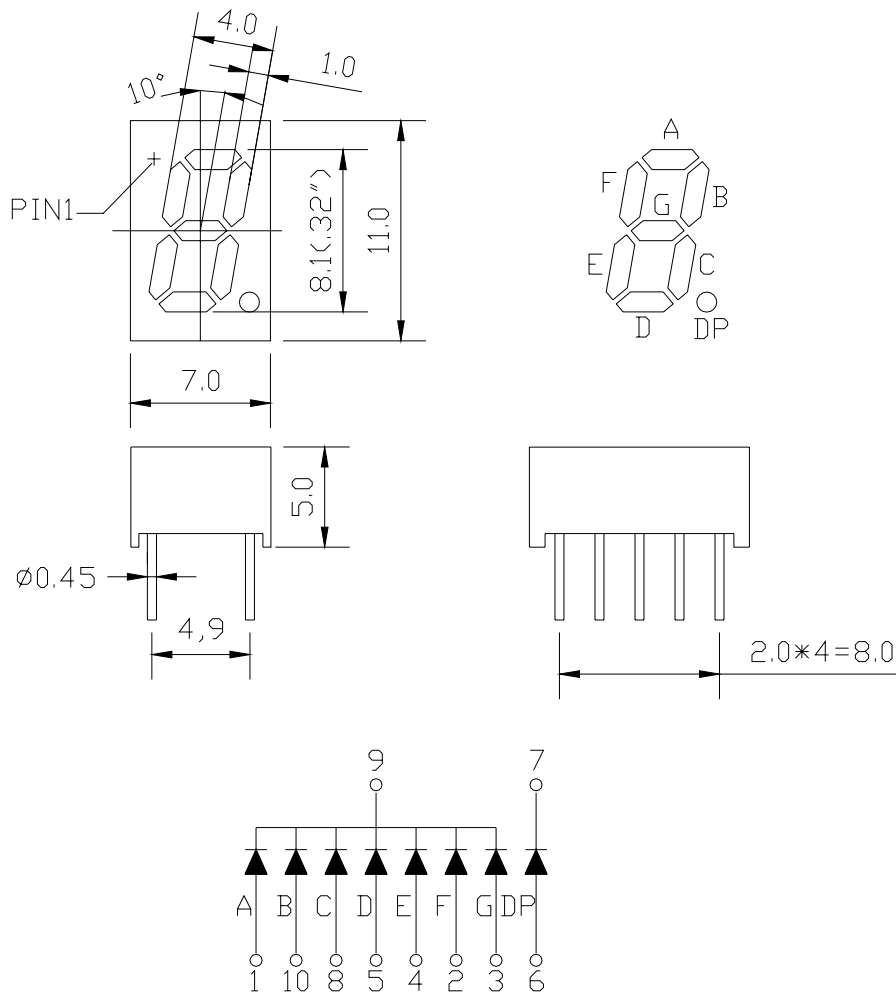
QC:

ENG:

Prepared By:

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Package Dimensions:



Part NO.	Chip Material	Source Color
KW1-311CSB	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	$V_R=5\text{V}$

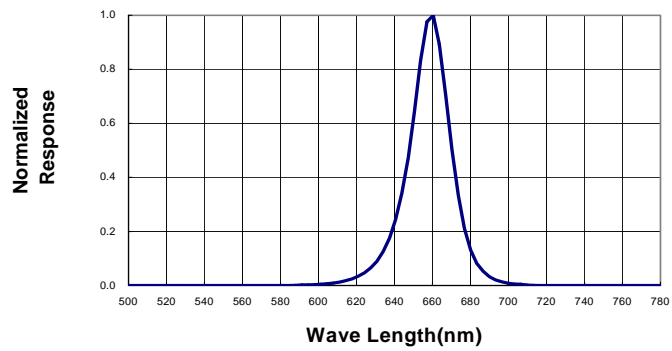
Notes:

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

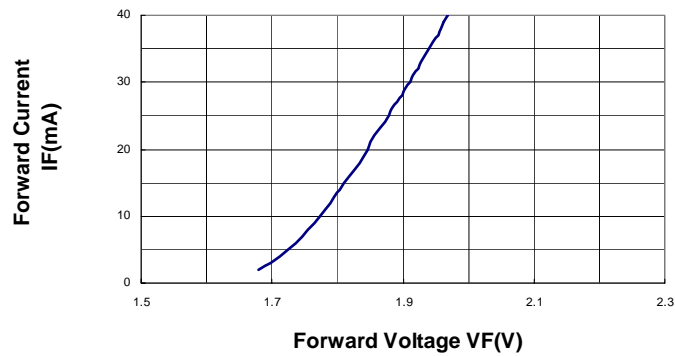
Typical Electrical / Optical Characteristics Curves

(25 Ambient Temperature Unless Otherwise Noted)

Spectral Radiance (Peak @ 660nm)



Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current

