

FEATURES

- * 0.315 -INCH (8.0-mm) DIGIT HEIGHT
- * CONTINUOUS UNIFORM SEGMENTS
- * LOW POWER REQUIREMENT
- * EXCELLENT CHARACTERS APPEARANCE
- * CATEGORIZED FOR LUMINOUS INTENSITY
- * I.C. COMPATIBLE
- * EASY MOUNTING ON P.C. BOARD OR SOCKET
- * **LEAD-FREE PACKAGE (ACCORDING TO ROHS)**

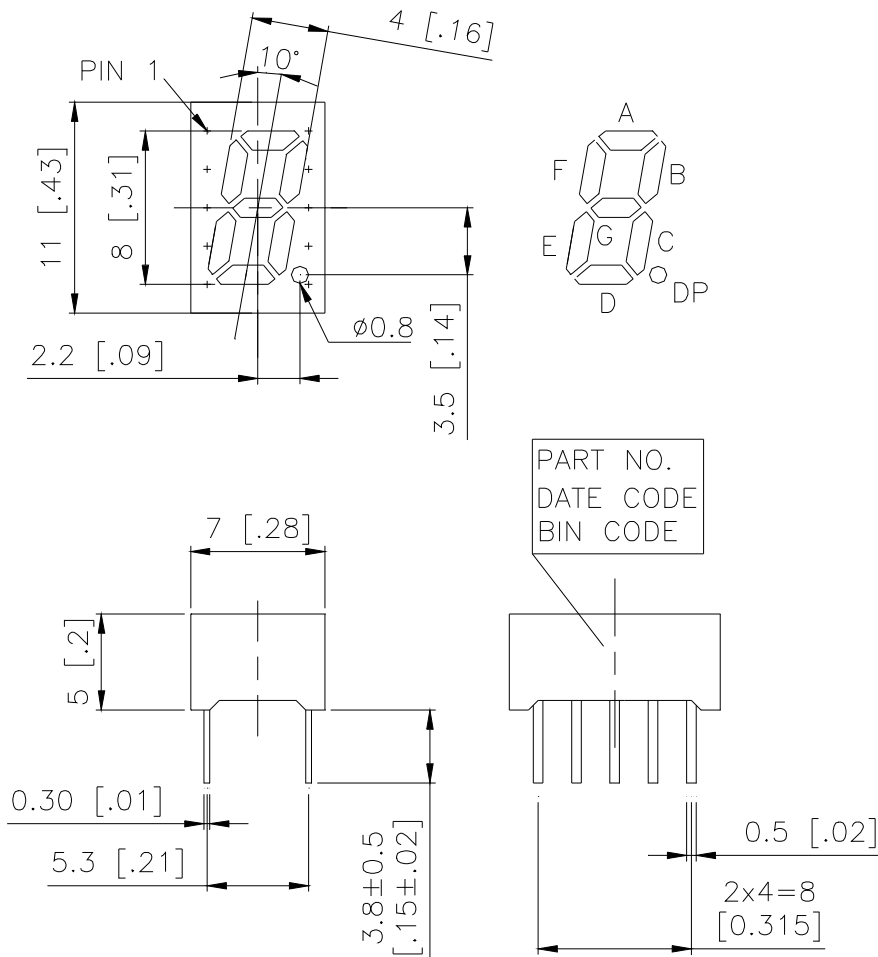
DESCRIPTION

The LTS-3867KD-J is a 0.315-inch (8.0-mm) digit height single digit seven-segment display. The device utilizes AlInGaP Hyper Red LED chip (AlInGaP epi on GaAs substrate). It has a black face and red segments.

DEVICE

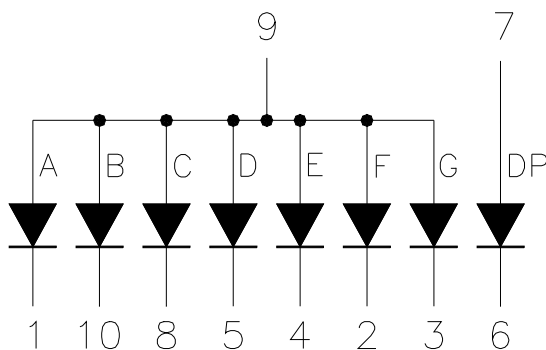
PART NO.	DESCRIPTION
AlInGaP Hyper Red	Common Anode Rt. Hand Decimal
LTS-3867KD-J	

PACKAGE DIMENSIONS



- NOTES: 1. All dimensions are in millimeters. Tolerances are $\pm 0.25\text{mm}$ ($0.01''$) unless otherwise noted.
 2. Pin tip's shift tolerance is ± 0.4 mm.

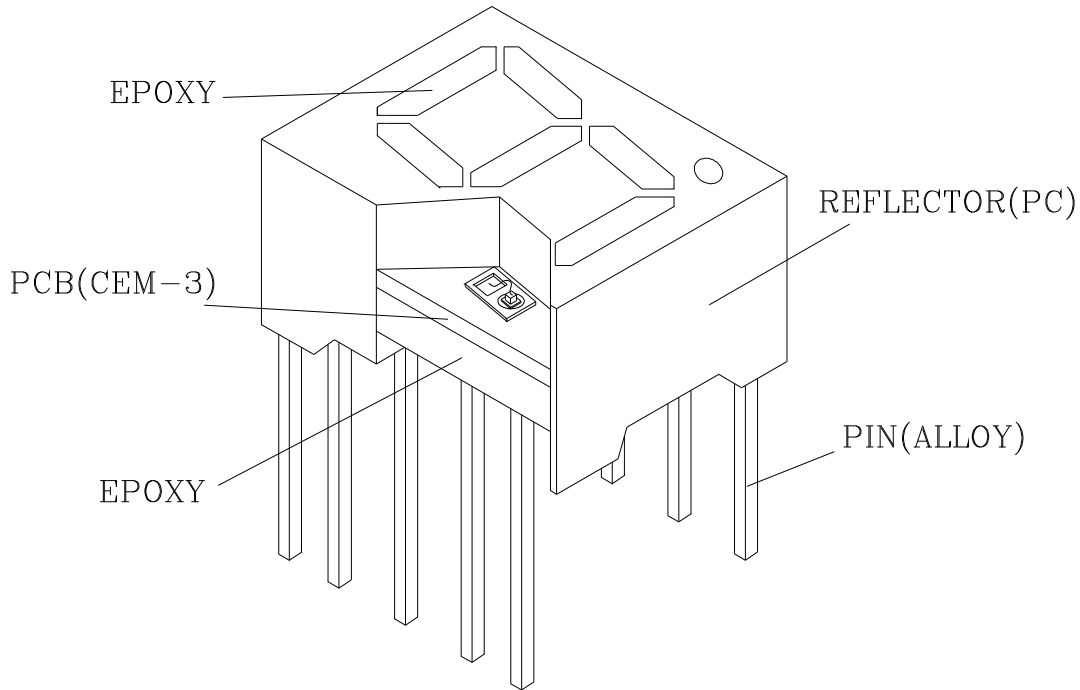
INTERNAL CIRCUIT DIAGRAM



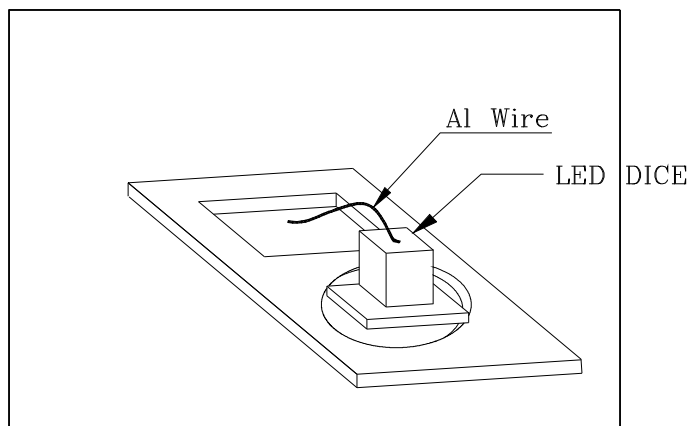
PIN CONNECTION

No.	CONNECTION
1	CATHODE A
2	CATHODE F
3	CATHODE G
4	CATHODE E
5	CATHODE D
6	CATHODE DP
7	ANODE DP
8	CATHODE C
9	COMMON ANODE
10	CATHODE B

STRUCTURE DETAIL



1. Ag CONDUCTIVE EPOXY USING
2. ON THE PCB, COATING A LAYER OF INK FOR CONTROLLING THE Ag EPOXY SCOPE



ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment (Frequency 1Khz, 18% duty cycle)	90	mA
Continuous Forward Current Per Segment	25	mA
Derating Linear From 25 ⁰ C Per Segment	0.33	mA/ ⁰ C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35 ⁰ C to +105 ⁰ C	
Storage Temperature Range	-35 ⁰ C to +105 ⁰ C	
Solder Temperature 1/16 inch Below Seating Plane for 5 Seconds at 260 ⁰ C		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25⁰C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	320	900		μcd	I _F =1 mA
Peak Emission Wavelength	λ _p		650		nm	I _F =20mA
Spectral Line Half-Width	Δλ		20		nm	I _F =20mA
Dominant Wavelength	λ _d		639		nm	I _F =20mA
Forward Voltage Per Segment	V _F		2.1	2.6	V	I _F =20mA
Reverse Current Per Segment	I _R			100	μA	V _R =5V
Luminous Intensity Matching Ratio (Same Light Area)	I _{v-m}			2:1		I _F =1mA

Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclariage) eye-response curve.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

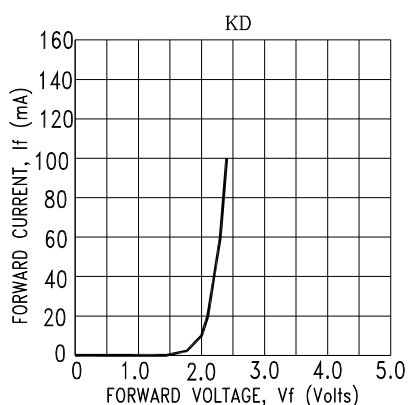
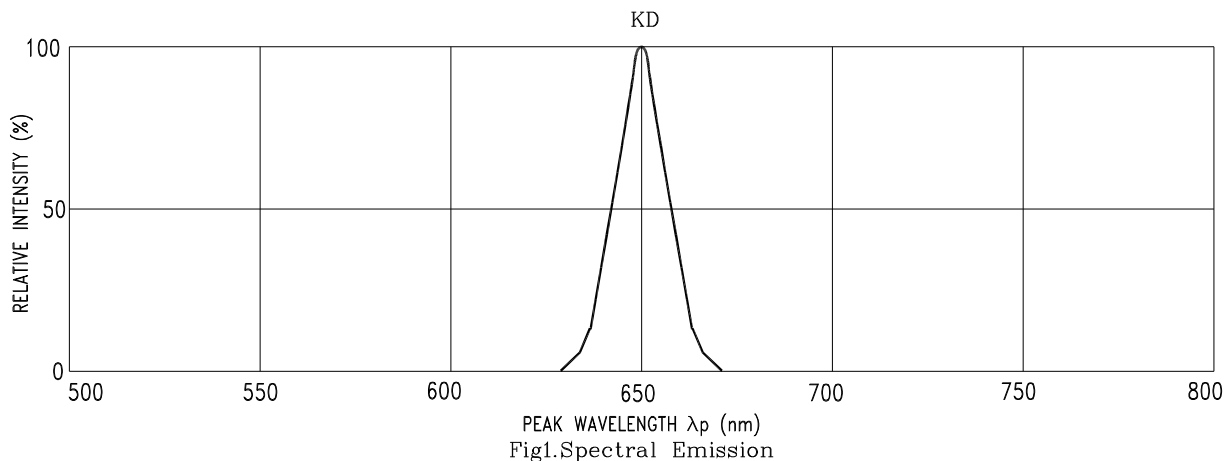


Fig2. Forward Current vs. Forward Voltage

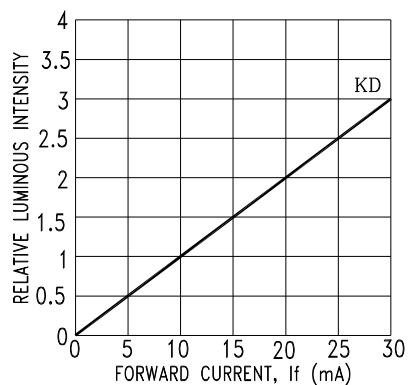


Fig3. Relative Luminous Intensity vs. DC Forward Current

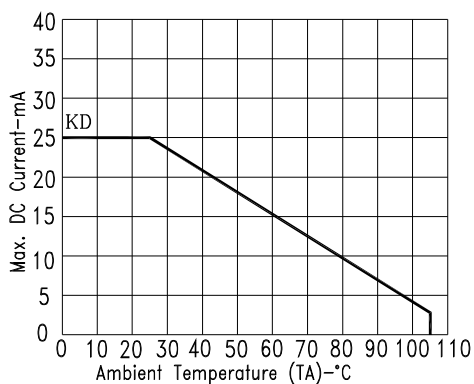


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

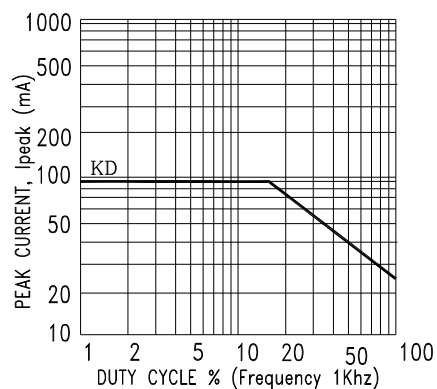


Fig5. Maximum Peak Current vs. Duty Cycle %

NOTE : KD=AlInGaP HYPER RED