

FEATURES

- * 0.39 inch (10.0 mm) DIGIT HEIGHT
- * CONTINUOUS UNIFORM SEGMENTS
- * LOW POWER REQUIREMENT
- * EXCELLENT CHARACTERS APPEARANCE
- * HIGH BRIGHTNESS & HIGH CONTRAST
- * WIDE VIEWING ANGLE
- * SOLID STATE RELIABILITY
- * CATEGORIZED FOR LUMINOUS INTENSITY
- * SMD DISPLAY
- * **LEAD FREE PACKAGE (ACCORDING TO ROHS)**

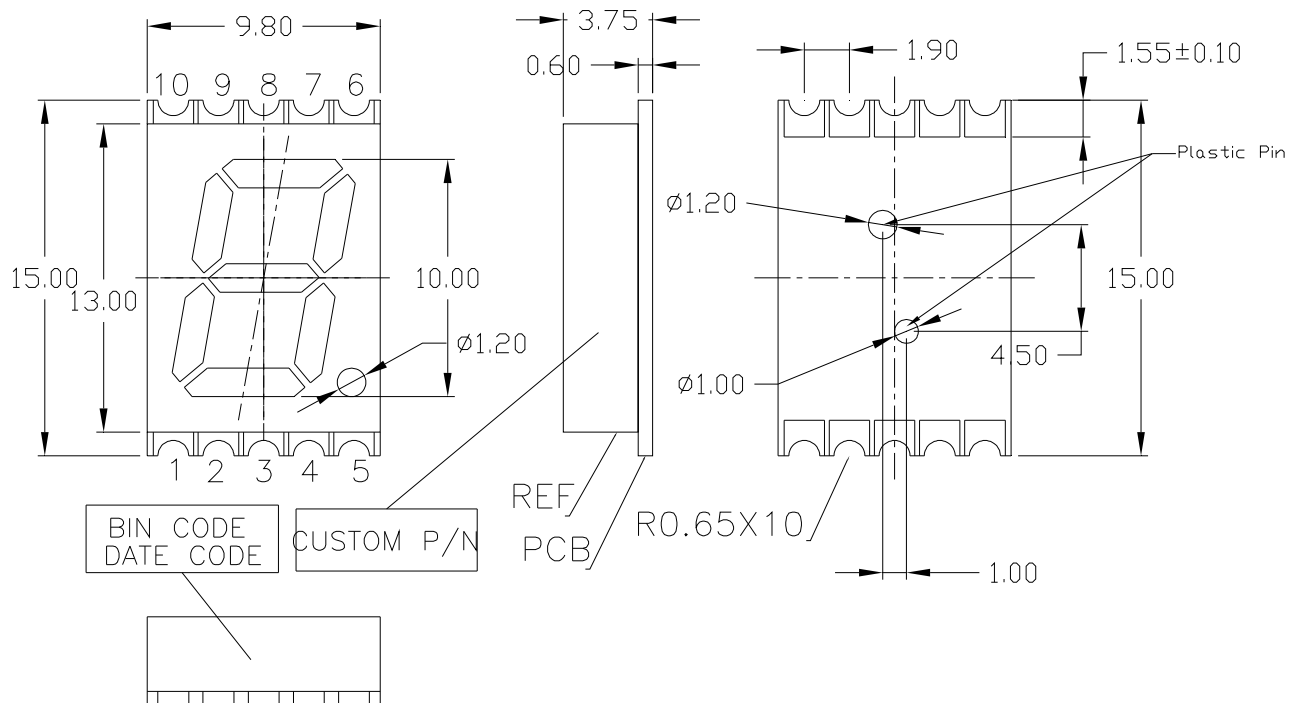
DESCRIPTION

The LTS-4812SKR-PA(L-930.507) is a 0.39 inch (10.0 mm) digit height single digit SMD display . This device uses AS-AlInGaP SUPER RED LED chips (AlInGaP epi on GaAs substrate). The display has dark gray face and white segments.

DEVICE

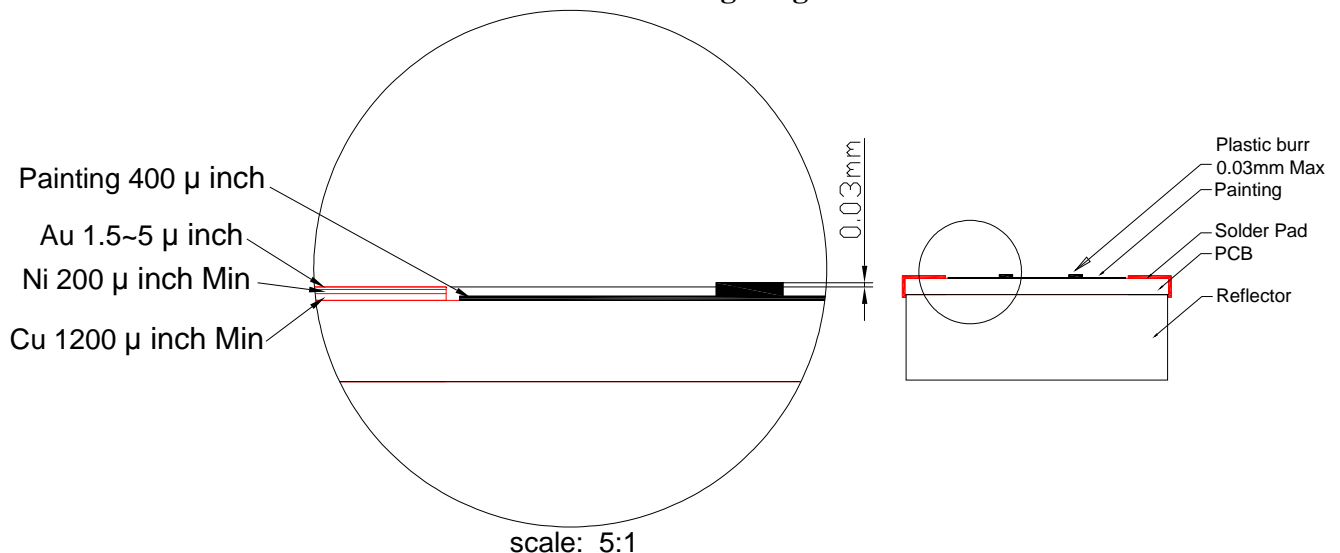
PART NO.	DESCRIPTION
AlInGaP RED	Common Anode
LTS-4812SKR-PA (L-930.507)	

PACKAGE DIMENSIONS



NOTE: 1. ALL DIMENSIONS ARE IN MILLIMETER.
2. TOLERANCES ARE ± 0.25 mm.

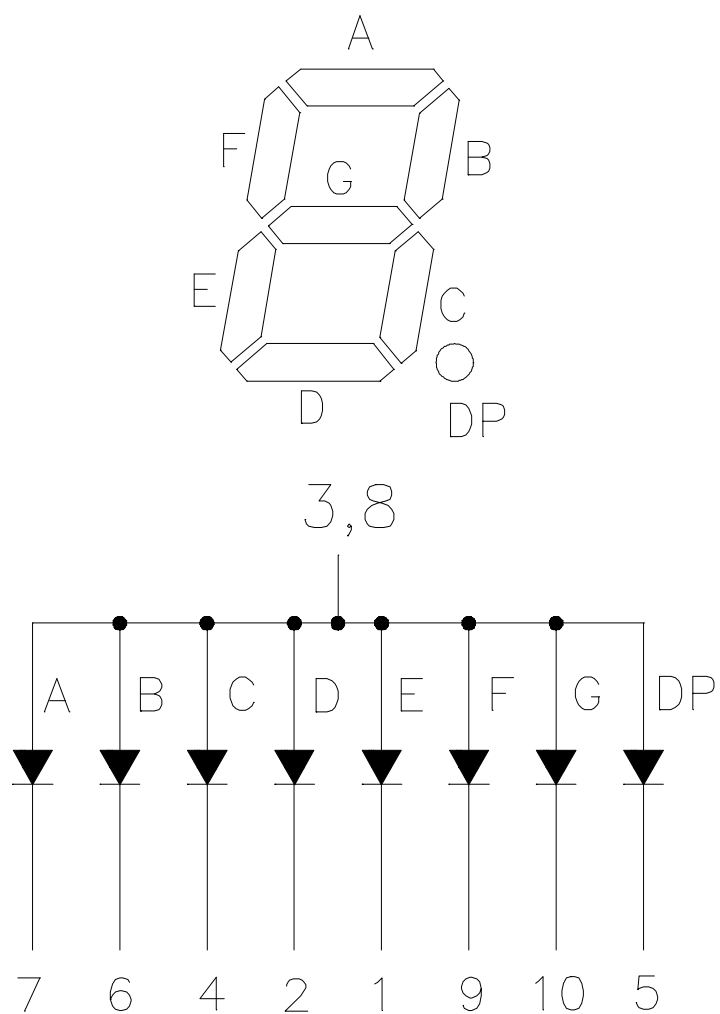
Solder Pad Vs Painting Diagram



NOTES:

1. Plastic pins' burr max. 0.03mm
2. All dimensions are in millimeters. Tolerances are ± 0.25 mm (0.01") unless otherwise noted.
3. Solder pad materials and thickness: Cu: 1200 μ inch Ni: Min 200 μ inch Au: 1.5~5 μ inch

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

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

ABSOLUTE MAXIMUM RATING AT Ta = 25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment (Frequency 1Khz,10% duty cycle)	90	mA
Continuous Forward Current Per Segment	25	mA
Forward Current Derating from 25 ⁰ C	0.27	mA/ ⁰ C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-40 ⁰ C to +105 ⁰ C	
Storage Temperature Range	-40 ⁰ C to +105 ⁰ C	
Iron Soldering Conditions: 1/16 inch Below Seating Plane for 3 Seconds at 260 ⁰ C		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Peak Emission Wavelength	λ_p		639		nm	I _F =2mA
Spectral Line Half-Width	$\Delta\lambda$		20		nm	I _F =2mA
Dominant Wavelength	λ_d		631		nm	I _F =2mA
Forward Voltage Per Segment	V _F		2.05	2.6	V	I _F =20mA
Reverse Current Per Segment	I _R			100	nA	V _R =5V
Luminous Intensity Matching Ratio	I _{v-m}			2:1		I _F =2mA

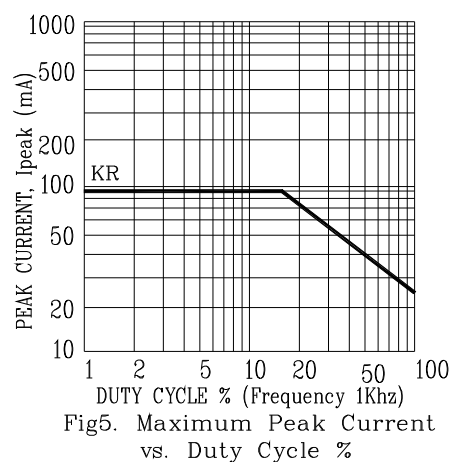
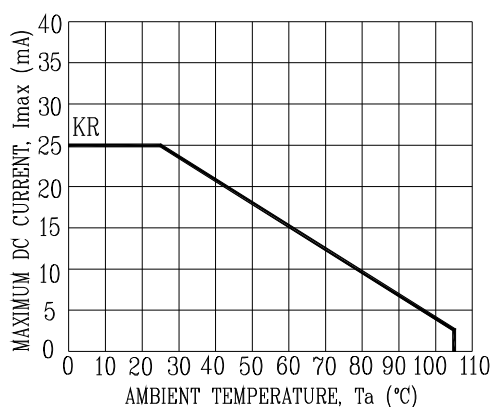
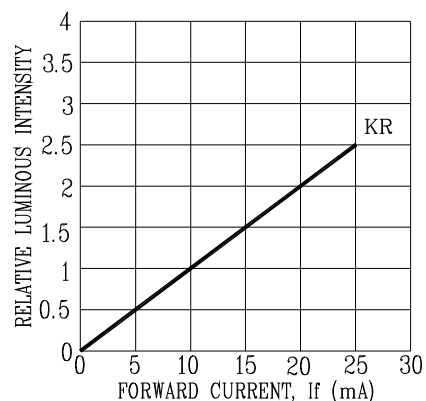
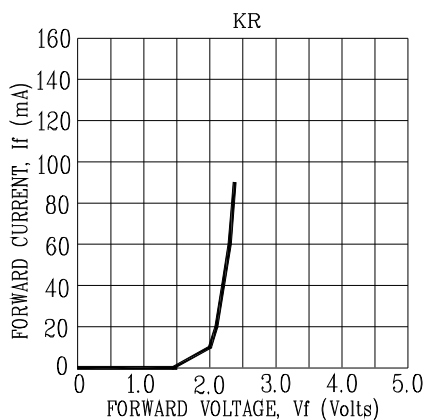
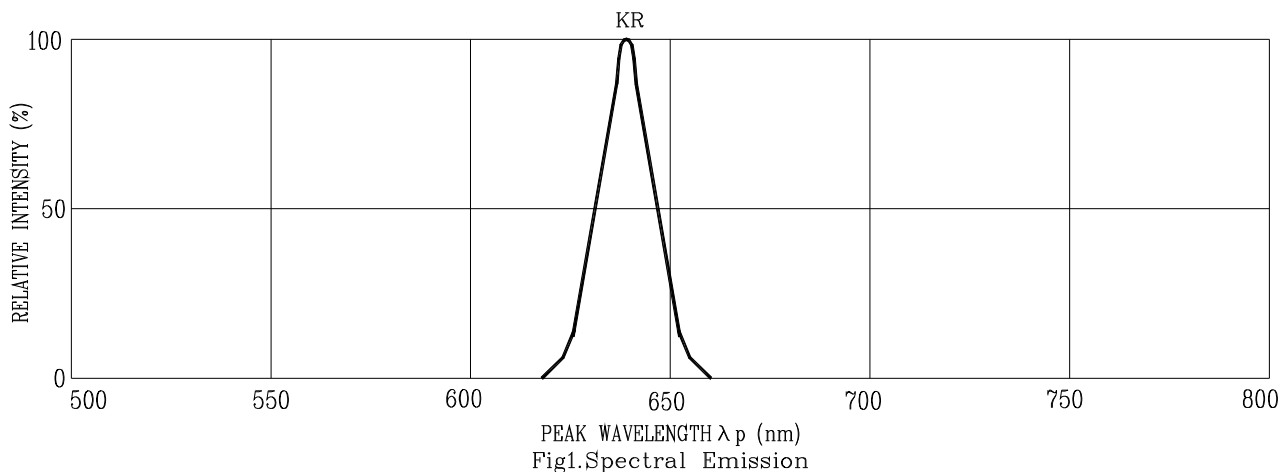
Note:Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

LUMINOUS INTENSITY BIN SELECTIONS : IF=2mA (Unit : ucd)**(Only one BIN for each reel)**

Rank	Min.	Max.
J2	1651	2100
K1	2101	2680
K2	2681	3400
L1	3401	4300

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

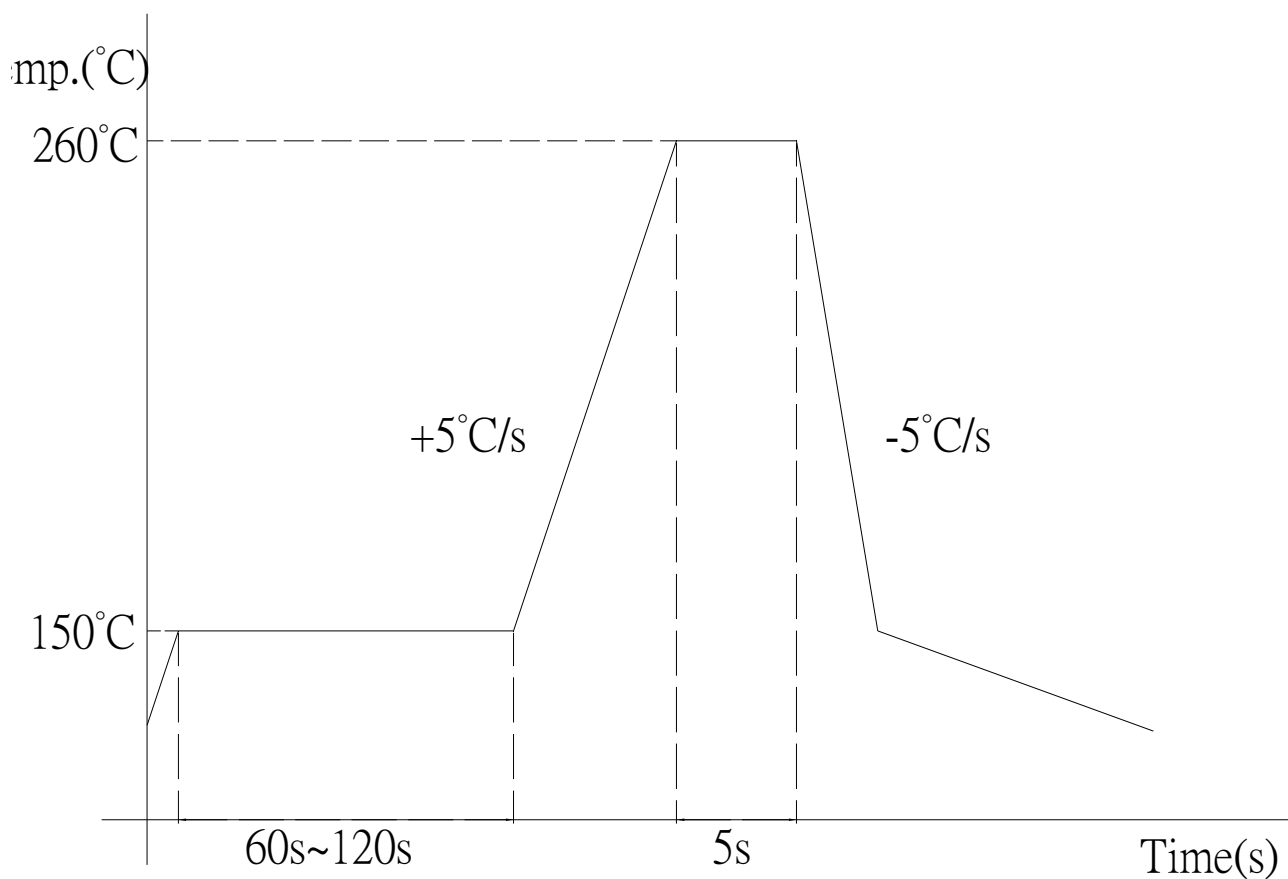
(25°C Ambient Temperature Unless Otherwise Noted)



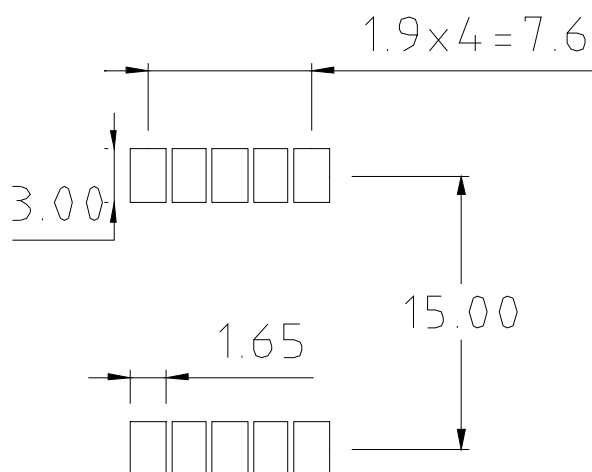
NOTE : KR=AlInGaP SUPER RED

SMT SOLDERING INSTRUCTION

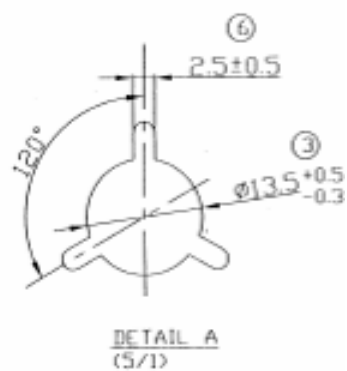
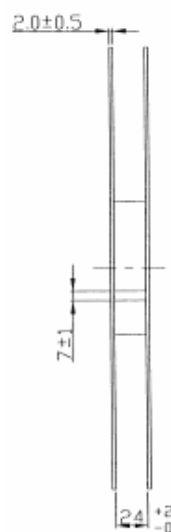
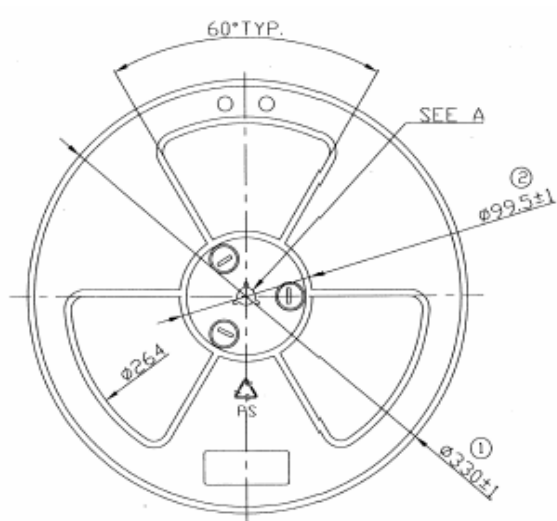
(Number of reflow process shall be less than 2 times, and cooling process to normal temperature is required between the first and the second soldering process)

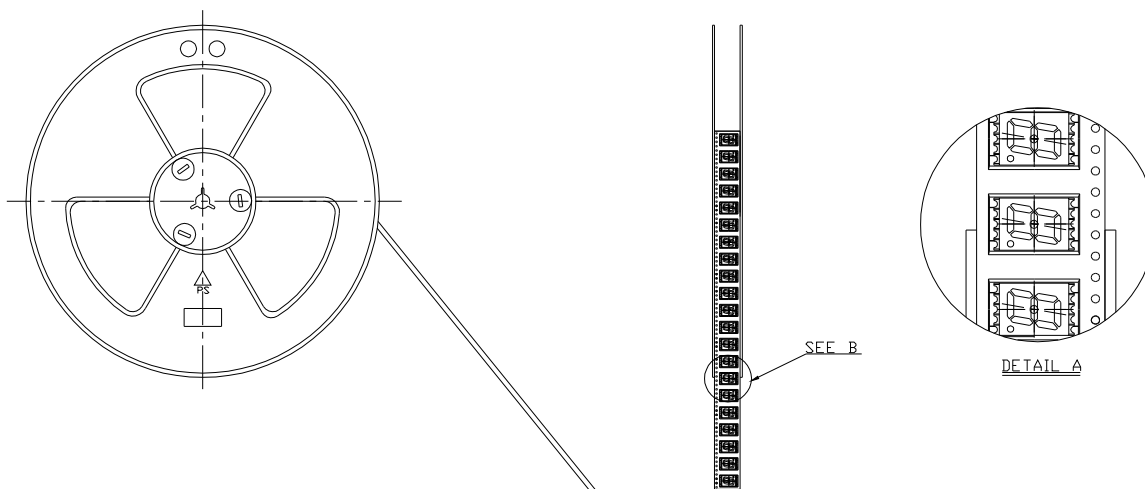


RECOMMENDED SOLDERING PATTERN (UNIT : mm)



PACKING REEL DIMENSIONS





TAPE & REEL DIMENSIONS

(UNIT:mm)

TAPE →

