

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

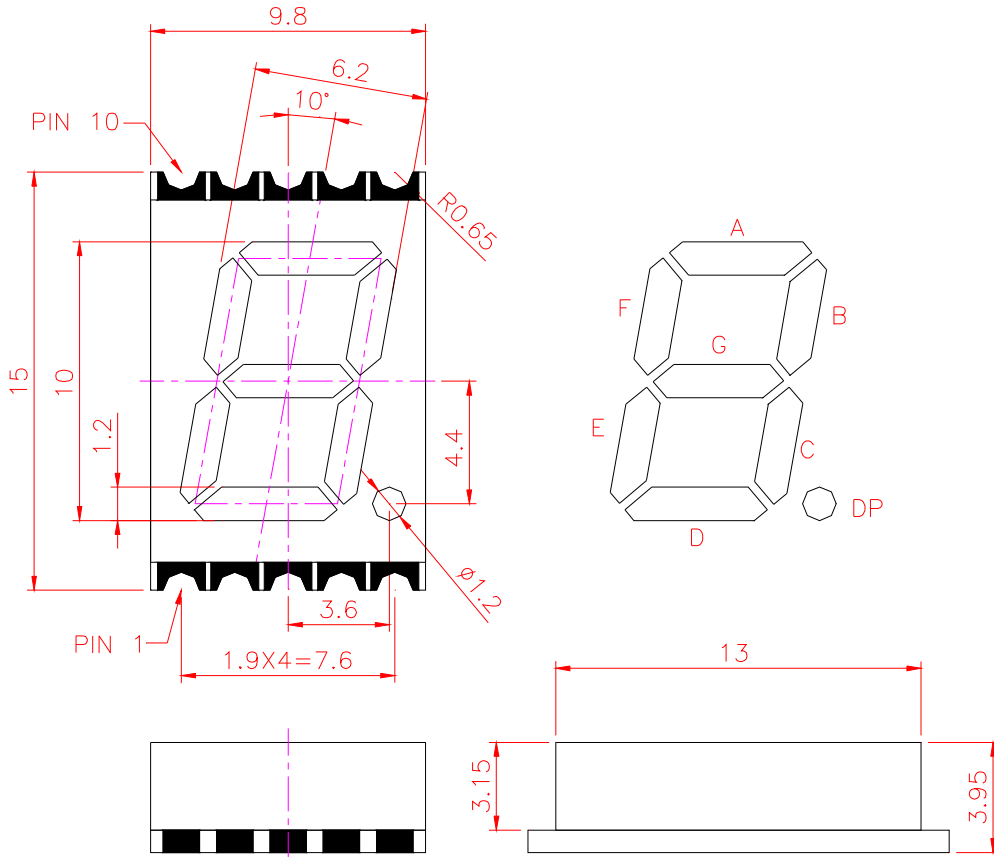
DESCRIPTION

The LTS-4812SKR-P is a 0.39 inch (10.0 mm) digit height single digit SMD display. This device utilizes AllnGaP SUPER RED LED chips which are made from Aluminum Indium Gallium Phosphide on GaAs. The display has gray face and white segments.

DEVICE

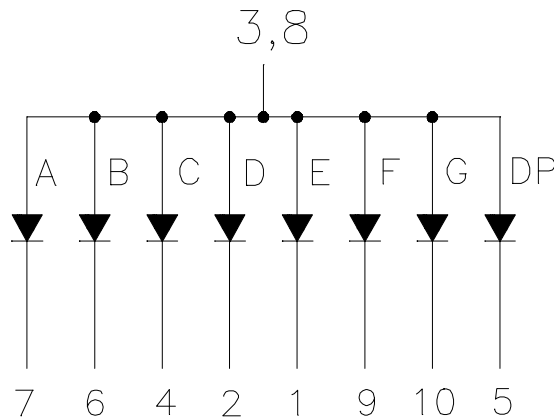
PART NO.	DESCRIPTION
AllnGaP SUPER RED	Common Anode
LTS-4812SKR-P	

PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerances are ± 0.25 -mm (0.01“) unless otherwise noted.

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	75	mW
Peak Forward Current Per Segment (Frequency 1Khz,10% duty cycle)	90	mA
Continuous Forward Current Per Segment	2.6	mA
Forward Current Derating from 25°C	0.28	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-25°C to +105°C	
Storage Temperature Range	-25°C to +105°C	
Soldering Conditions: 1/16 inch Below Seating Plane for 3 Seconds at 260°C		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	I _v	17.5	37.8		mcd	I _F =20mA
Peak Emission Wavelength	λ _p		639		Nm	I _F =20mA
Spectral Line Half-Width	Δλ		20		Nm	I _F =20mA
Dominant Wavelength	λ _d		631		Nm	I _F =20mA
Forward Voltage Per Segment	V _F		2.0	2.4	V	I _F =20mA
Reverse Current Per Segment	I _R			100	μA	V _R =5V
Luminous Intensity Matching Ratio	I _v -m			2:1		I _F =20mA

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

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

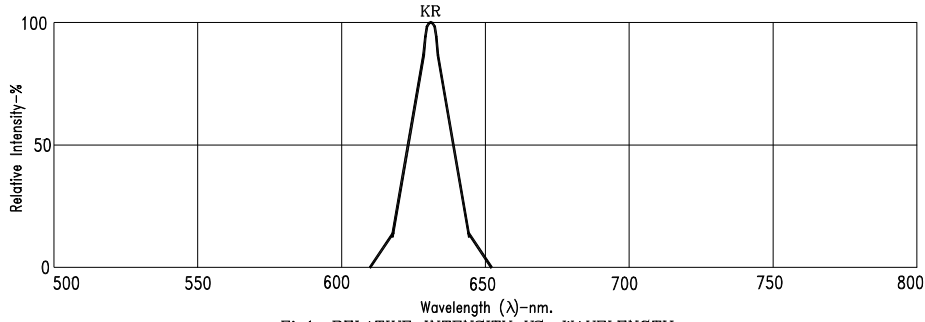


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

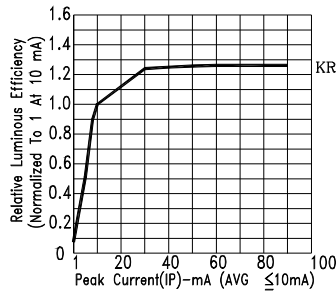


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT

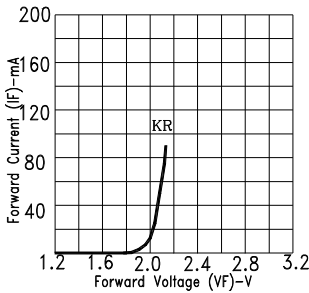


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

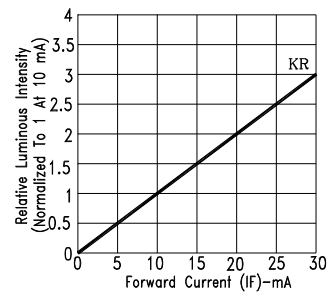


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

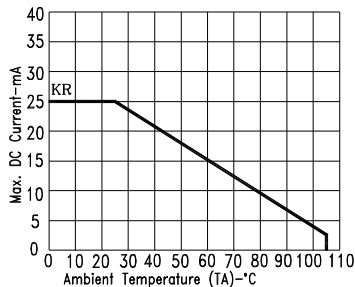


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

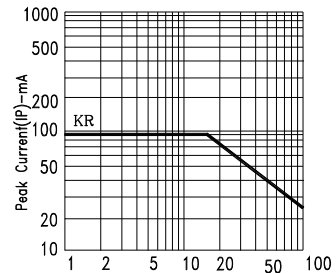
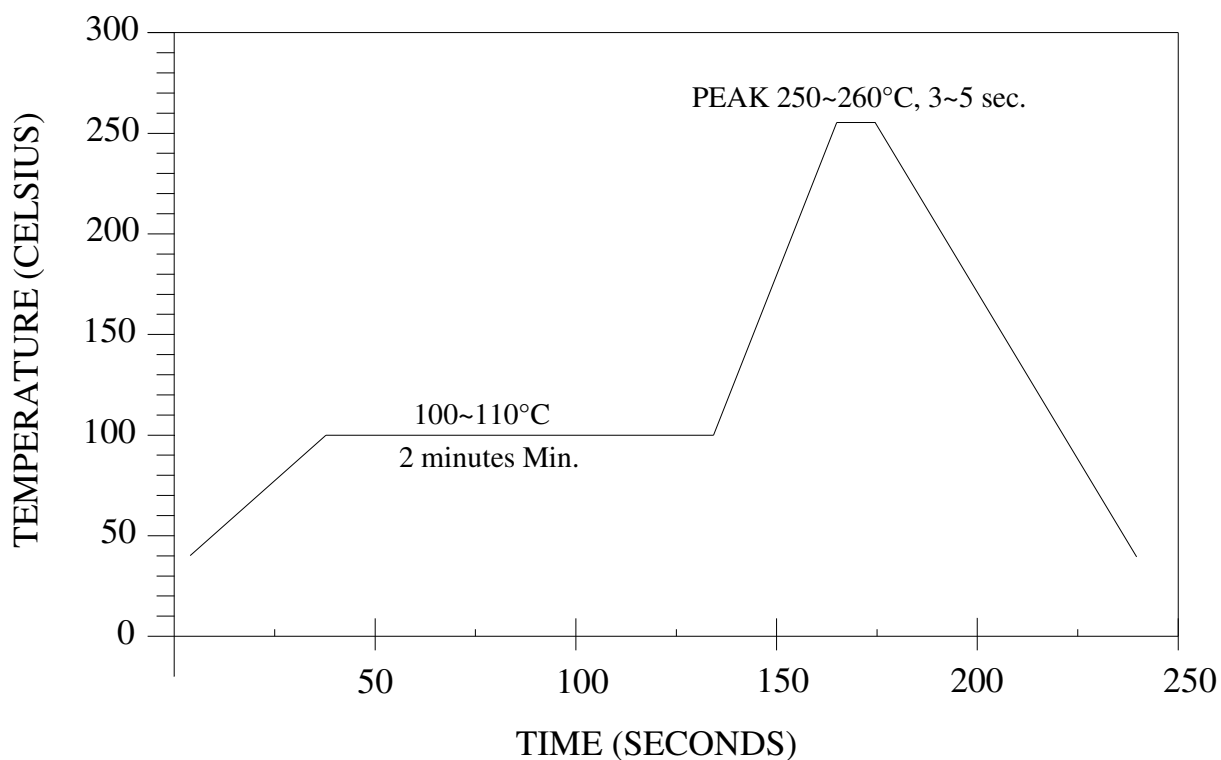


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

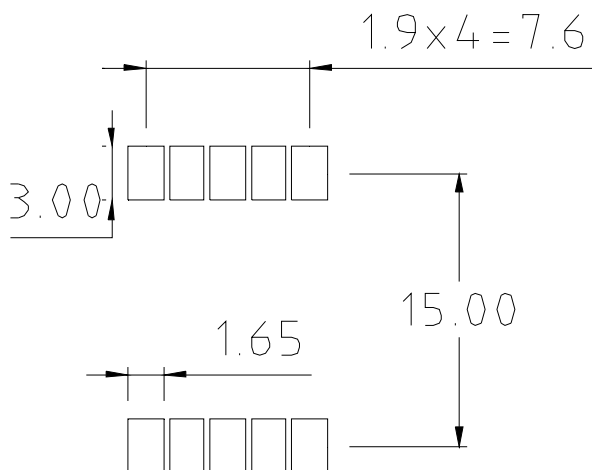
NOTE : KR=AlInGaP HYPER RED

SMT SOLDERING INSTRUCTION

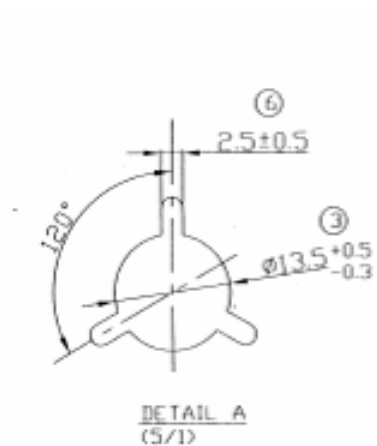
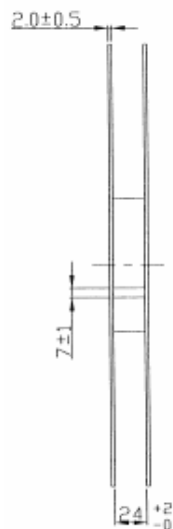
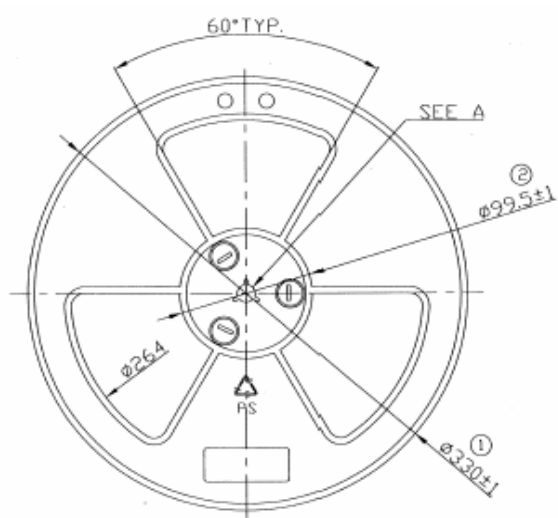
(Number of reflow process shall be less than 2 times, and cooling process to normal temperature is required between the first and the second soldering process)

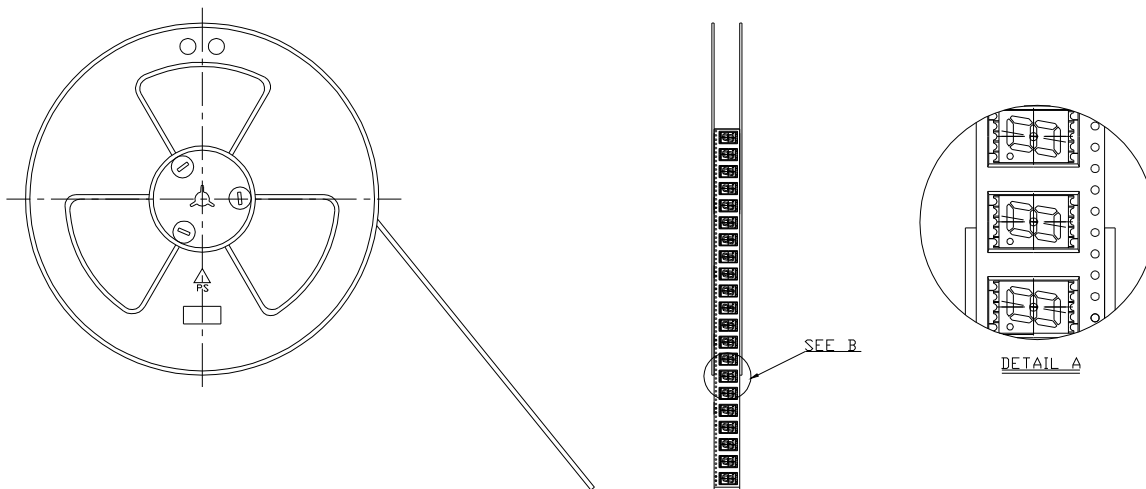


RECOMMENDED SOLDERING PATTERN (UNIT : mm)



PACKING REEL DIMENSIONS





TAPE & REEL DIMENSIONS

(UNIT:mm)

TAPE →

