FEATURES

∗0.28 INCH (7.0 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
∗**LEAD FREE PACKAGE**

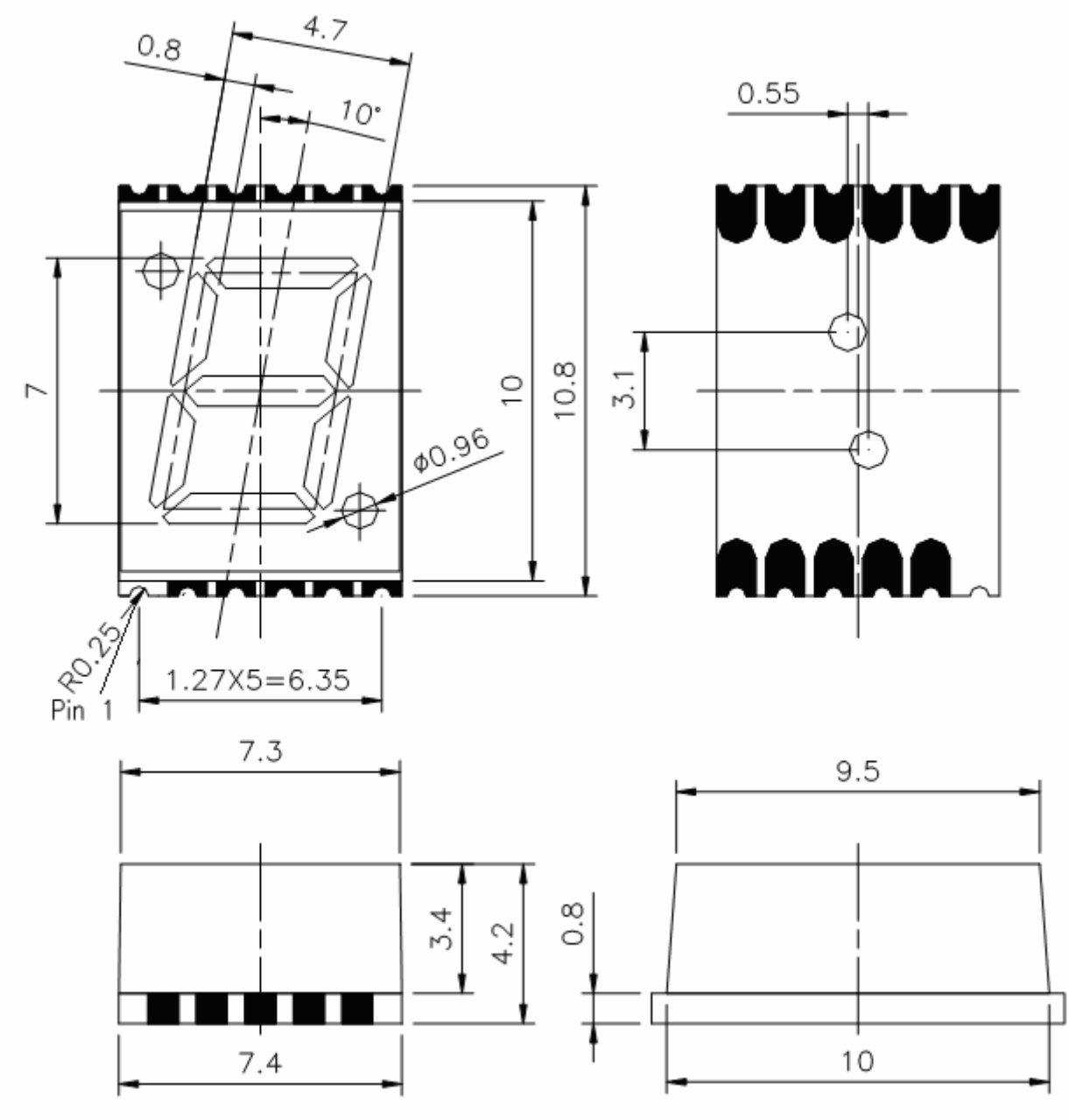
DESCRIPTION

The LTS-2805SKR-P is a 0.28inch (7.0mm) digit height single digit seven-segment display. This device uses AlInGaP SUPER RED chips (AlInGaP epi on GaAs substrate). The display has a gray face and white segments.

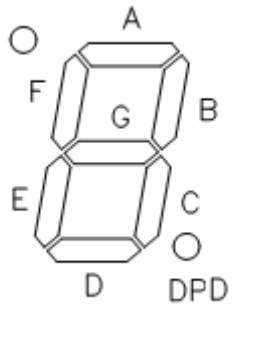
DEVICE

PART NO.	DESCRIPTION
AllnGaP SUPER RED	COMMON ANODE
LTS-2805SKR-P	

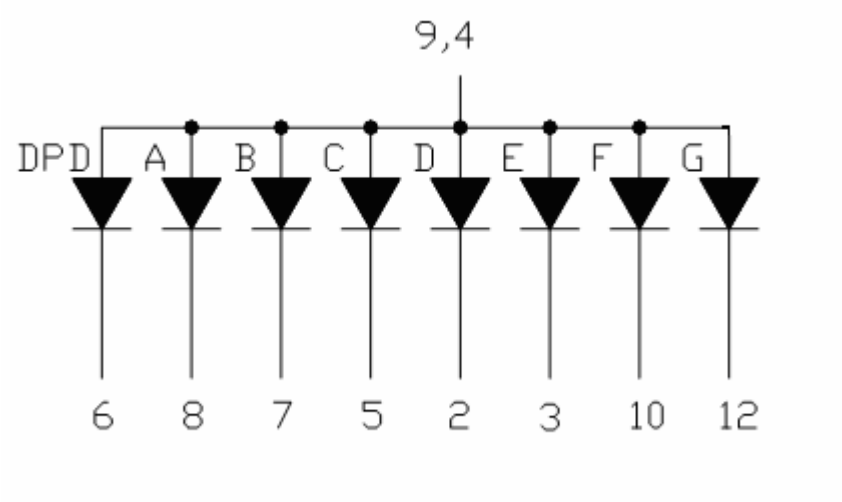
PACKAGE DIMENSIONS



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



INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

No.	CONNECTION
1	NO CONNECTION
2	CATHODE D
3	CATHODE E
4	COMMON ANODE
5	CATHODE C
6	CATHODE DPD
7	CATHODE B
8	CATHODE A
9	COMMON ANODE
10	CATHODE F
11	CATHODE DPA
12	CATHODE G

ABSOLUTE MAXIMUM RATING

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
Derating Linear From 25^0C Per Segment	0.33	mA/^{0}C
Reverse Voltage Per Segment	5	V
*Electrostatic Discharge Threshold(HBM)	300	V
Operating Temperature Range	-40^0C to +105^0C	
Storage Temperature Range	-40^0C to +105^0C	
Solder Temperature 1/16 inch Below Seating Plane for 3 Seconds at 260^0C		
IR Reflow conditions as Page 6 of 6		

* HBM: Human Body Model. Seller gives no other assurances regarding the ability of product to withstand ESD.

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25^oC

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V		900		μcd	I_F=1mA
			11700			I_F=10mA
Peak Emission Wavelength	λp		639		Nm	I_F=20mA
Spectral Line Half-Width	Δλ		20		Nm	I_F=20mA
Dominant Wavelength	λd		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=1mA

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

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

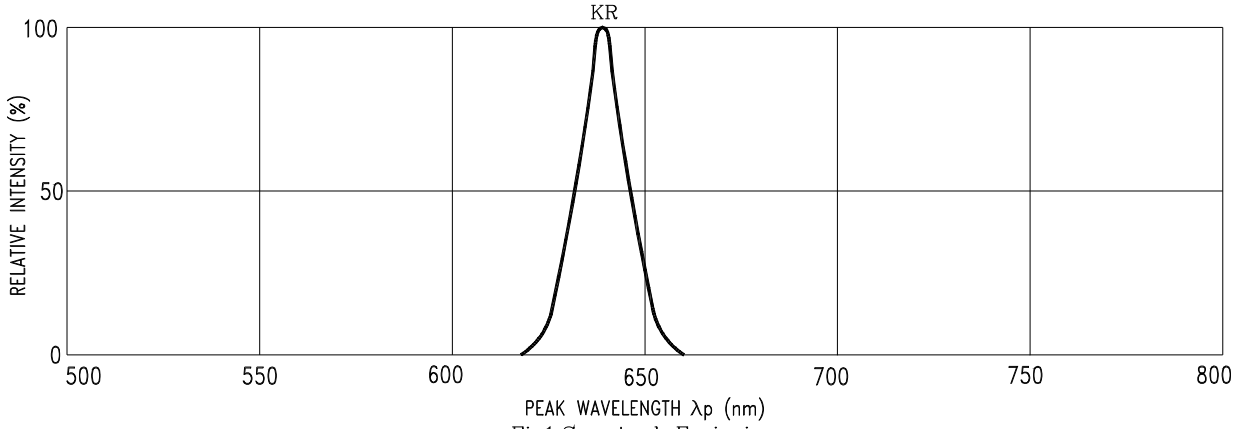


Fig1.Spectral Emission

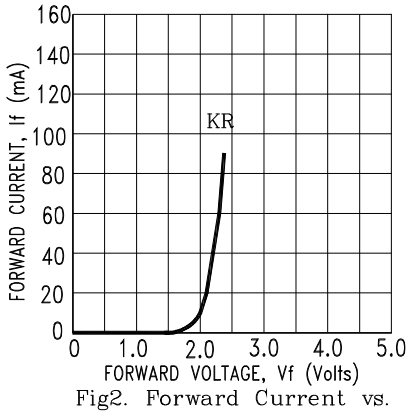


Fig2. Forward Current vs. Forward Voltage

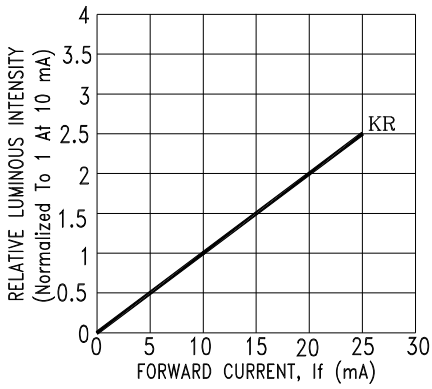


Fig3. Relative Luminous Intensity vs. DC Forward Current

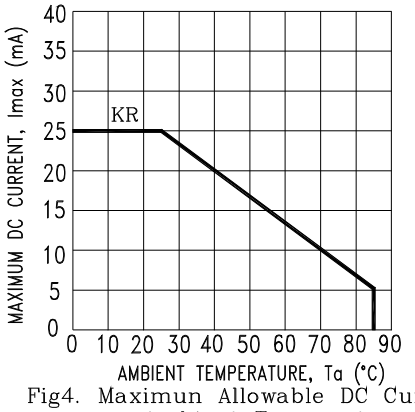


Fig4. Maximun Allowable DC Current vs. Ambient Temperature

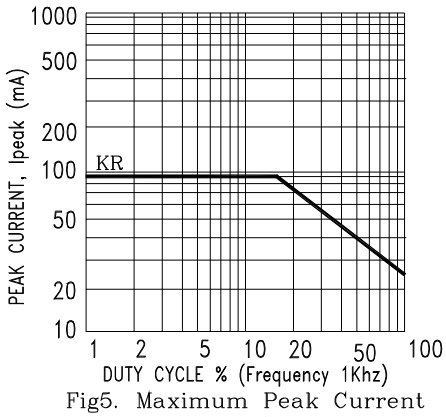
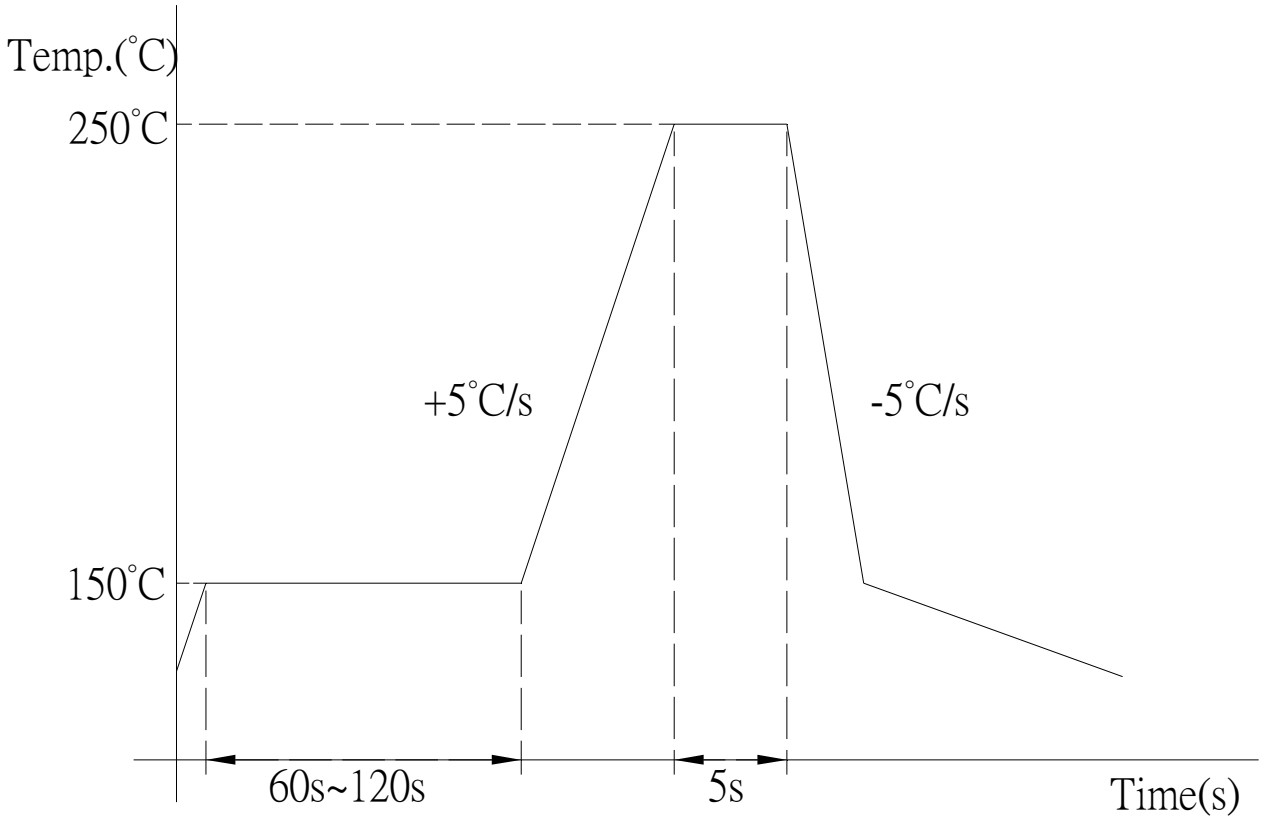


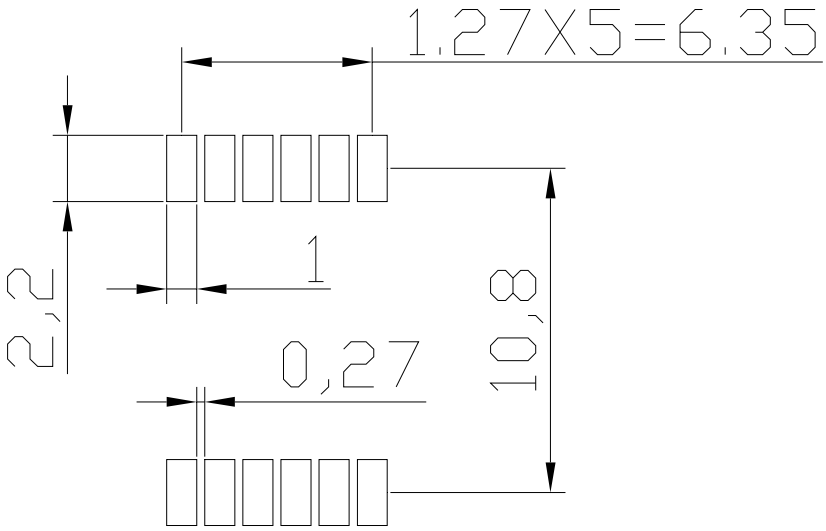
Fig5. Maximum Peak Current vs. Duty Cycle %

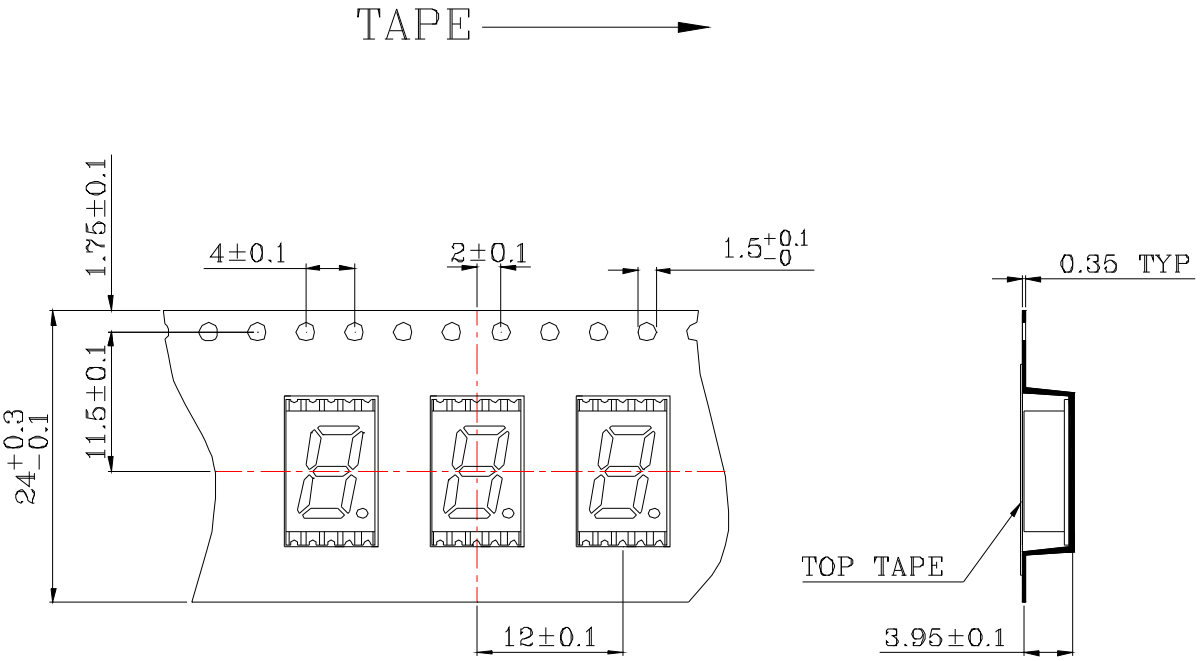
NOTE : KR= AlInGaP SUPER RED

IR REFLOW MAXIMUM RATING TEMPERATURE



RECOMMENDED SOLDERING PATTERN (UNIT : mm)



0.28 inch (7.0mm)

Single-Digit Surface Mount Led Display