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FEATURES

- *0.39 INCH (10.0mm) 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-4802BJF-H1 is a 0.39 inch (10.0mm) height digit display. This device utilizes AlInGaP yellow orange LED chips, which are made from AlInGaP on non-transparent GaAs substrate, and has a light gray face and white segments.

This low current seven-segment display is designed to perform under low power consumption. It is tested and selected for it's excellent low current characteristics. It can be driven in low current condition and the segments are matched. This driving current as low as 1mA per segment is applicable.

DEVICE

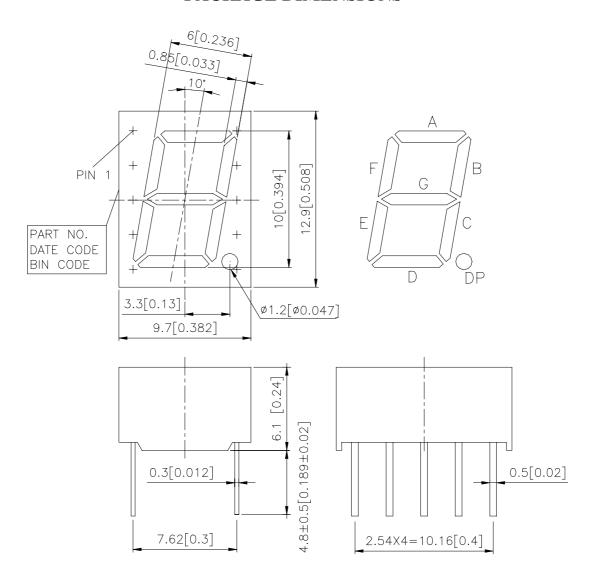
PART NO.	DESCRIPTION			
AlInGaP Yellow Orange	Common Anode			
LTS-4802BJF-H1	Rt. Hand Decimal			

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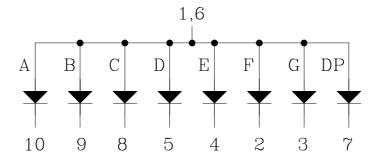
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PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerances are \pm 0.25-mm (0.01") unless otherwise noted.

INTERNAL CIRCUIT DIAGRAM



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PIN CONNECTION

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

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ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT			
Power Dissipation Per Segment	70	mW			
Peak Forward Current Per Segment	00				
(1/10 Duty Cycle, 0.1ms Pulse Width)	90	mA			
Continuous Forward Current Per Segment	25	mA			
Derating Linear From 25 ^o C Per Segment	0.28	mA/ ⁰ C			
Reverse Voltage Per Segment	5	V			
Operating Temperature Range	-35° C to $+105^{\circ}$ C				
Storage Temperature Range	-35°C to +105°C				
Solder Temperature 1/16 inch Below Seating Plane for 3 Seconds at 260 ^o C					

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

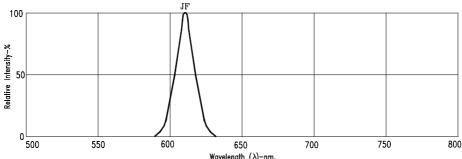
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	200	650		μcd	I _F =1mA
Peak Emission Wavelength	λр		611		nm	I _F =20mA
Spectral Line Half-Width	Δλ		17		nm	I _F =20mA
Dominant Wavelength	λd		605		nm	I _F =20mA
Forward Voltage Per Segment	VF		2.05	2.6	V	I _F =20mA
Reverse Current Per Segment	Ir			100	μΑ	V _R =5V
Luminous Intensity Matching Ratio	Iv-m			2:1		I _F =10mA

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

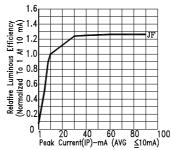
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TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

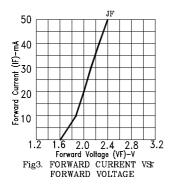


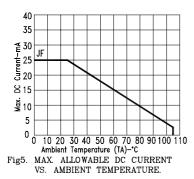
Wavelength (\(\lambda\right)\)-nm.
Fig1. RELATIVE INTENSITY VS. WAVELENGTH



0 1 20 40 60 80 100
Peak Current(IP)-mA (AVG \$10mA)

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





JF 0 5 10 15 20 25 30 Forward Current (IF)-mA Fig4. RELATIVE LUMINOUS INTENSITY

VS. FORWARD CURRENT

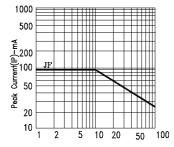


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE: JF=AlInGaP YELLOW ORANGE

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