



Spec No.: DS30-2001-314 Effective Date: 09/07/2010

Revision: B

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

LITEON

LITE-ON TECHNOLOGY CORPORATION

Property of Lite-On Only

FEATURES

- *0.4 inch (10 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-4801JF is a 0.4 inch (10 mm) height single digit seven-segment display. This device utilizes AlInGaP yellow orange LED chips, which are made from AlInGaP on a non-transparent GaAs substrate, and has a gray face and white segments.

DEVICE

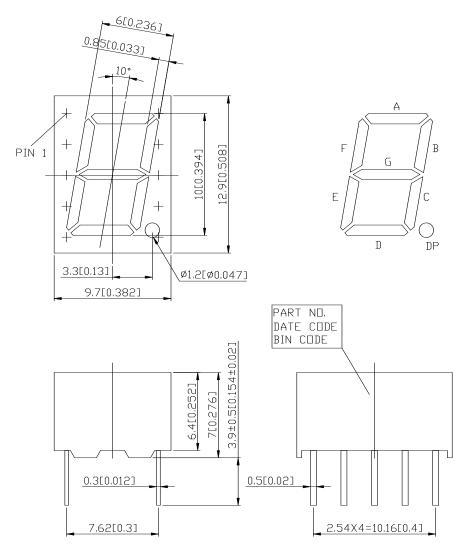
PART NO.	DESCRIPTION			
AlInGaP Yellow Orange	Common Anode			
LTS-4801JF	Rt. Hand Decimal			

PART NO.:LTS-4801JF PAGE: 1 of 5

LITE-ON TECHNOLOGY CORPORATION

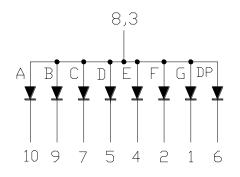
Property of Lite-On Only

PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



PART NO.:LTS-4801JF PAGE: 2 of 5



LITEON LITE-ON TECHNOLOGY CORPORATION

Property of Lite-On Only

PIN CONNECTION

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

PAGE: 3 of 5 PART NO.:LTS-4801JF



LITE-ON TECHNOLOGY CORPORATION

Property of Lite-On Only

ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT				
Power Dissipation Per Segment	70	mW				
Peak Forward Current Per Segment	60	mA				
(1/10 Duty Cycle, 0.1ms Pulse Width)						
Continuous Forward Current Per Segment	25	mA				
Derating Linear From 25°C Per Segment	0.33	mA/°C				
Reverse Voltage Per Segment	5	V				
Operating Temperature Range	-35°C to +85°C					
Storage Temperature Range	-35°C to +85°C					
Solder Temperature 1/16 inch Below Seating Plane for 3 Seconds at 260°C						

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

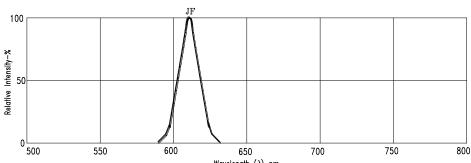
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	IV	200	650		μcd	IF=1mA
Peak Emission Wavelength	λρ		611		nm	IF=20mA
Spectral Line Half-Width	Δλ		17		nm	IF=20mA
Dominant Wavelength	λd		605		nm	IF=20mA
Forward Voltage Per Segment	VF		2.05	2.6	V	IF=20mA
Reverse Current Per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

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

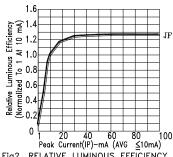
PART NO.:LTS-4801JF PAGE: 4 of 5

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

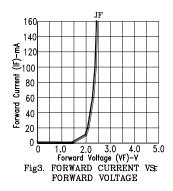
(25°C Ambient Temperature Unless Otherwise Noted)



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



Feak Current(IP)—MA (AVG __S10mA)
Fig2. RELATIVE LUMINOUS EFFICIENCY
(LUMINOUS INTENSITY PER UNIT
CURRENT) VS. PEAK CURRENT



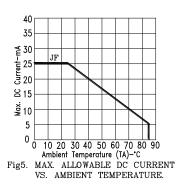


Fig4. RELATIVE LUMINOUS INTENSITY
VS. FORWARD CURRENT

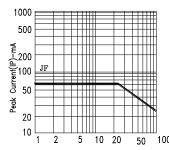


Fig6. MAX. PEAK CURRENT VS.
DUTY CYCLE %
(REFRESH RATE 1KHz)

 ${\tt NOTE} \; : \; {\tt JF=AlInGaP} \; \; {\tt YELLOW} \; \; {\tt ORANGE}$

PART NO.:LTS-4801JF PAGE: 5 of 5