LITEON
OPTOELECTRONICS

LED Display

Product Data Sheet

LTP-4823KF

Spec No.: DS30-2007-0165

Effective Date: 10/03/2007

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

LED DISPLAY

LTP-4823KF

DATA SHEET

Rev	Description	By
-	Original Spec	Phanomkorn J.

SPEC. NO.: DS30-2007-0165

D A T E : 05/September/'07

REV. NO. : -

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.
* **LEAD-FREE PACKAGE(ACCORDING TO ROHS)**

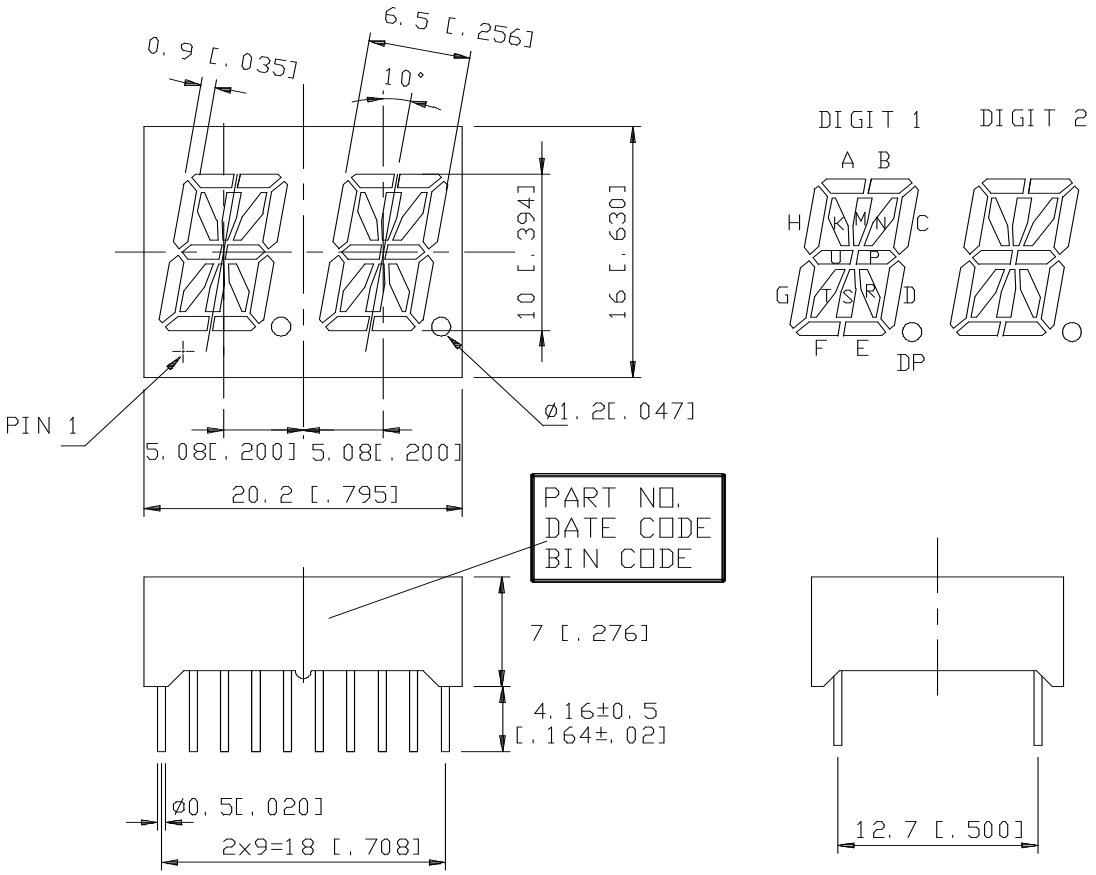
DESCRIPTION

The LTP-4823KF is a 0.4 inch (10 mm) digit height dual digit 16-segments alphanumeric 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

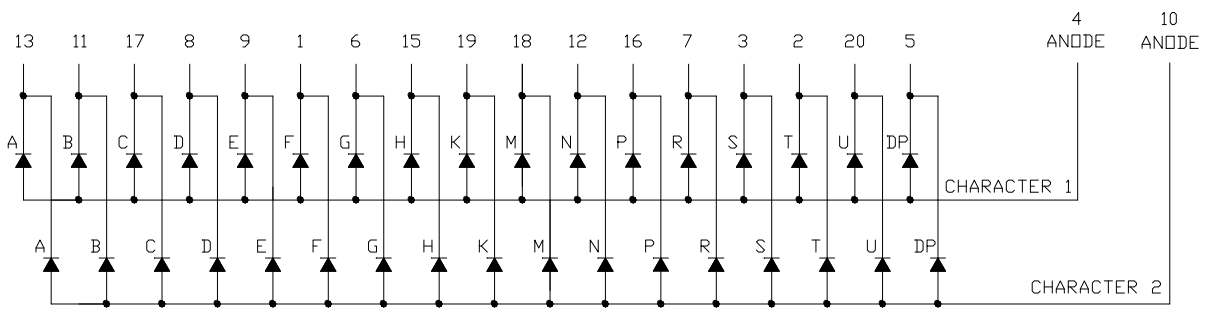
PART NO.	DESCRIPTION
AlInGaP Yellow Orange	DUPLEX COMMON ANODE
LTP-4823KF	RT. HAND DECIMAL

PACKAGE DIMENSIONS



NOTES: 1. All dimensions are in millimeters. Tolerances are ± 0.25 mm unless otherwise note.
2. Pin tip's shift tolerance is ± 0.4 mm.

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

No.	CONNECTION
1	CATHODE F
2	CATHODE T
3	CATHODE S
4	COMMON ANODE CHARACTER 1
5	CATHODE D.P.
6	CATHODE G
7	CATHODE R
8	CATHODE D
9	CATHODE E
10	COMMON ANODE CHARACTER 2
11	CATHODE B
12	CATHODE N
13	CATHODE A
14	NO CONNECTION
15	CATHODE H
16	CATHODE P
17	CATHODE C
18	CATHODE M
19	CATHODE K
20	CATHODE U

ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT
Average Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment	60	mA
Average Forward Current Per Segment Derating Linear From 25℃ Per Segment	25 0.33	mA mA/℃
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35℃ to +105℃	
Storage Temperature Range	-35℃ to +105℃	
Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260°C or of temperature unit (during assembly) not over max. temperature rating above.		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V	500	1300		μcd	I_F=1mA
Peak Emission Wavelength	λp		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	V_F		2.05	2.6	V	I_F=20mA
Reverse Current Per Segment	I_R			100	μA	V_R=5V
Luminous Intensity Matching Ratio (Similar Light Area)	Iv-m			2:1		I_F=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.

BIN TABLE 2					
RANGE	321-500	501-800	801-1300	1301-2100	2101-3400
BIN	F	G	H	J	K

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

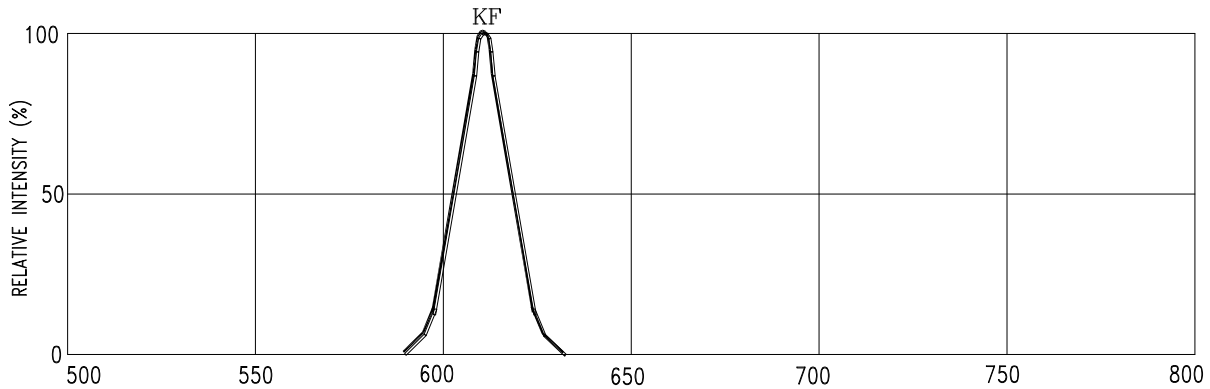


Fig1.Spectral Emission

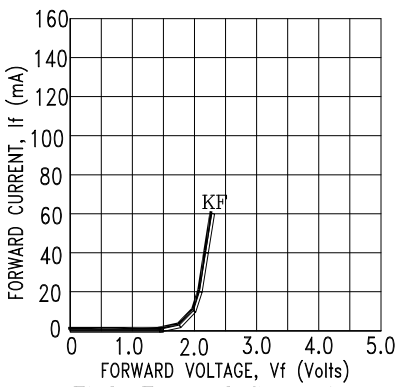


Fig2. Forward Current vs. Forward Voltage

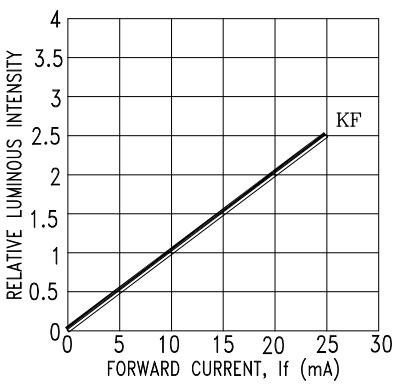


Fig3. Relative Luminous Intensity vs. DC Forward Current

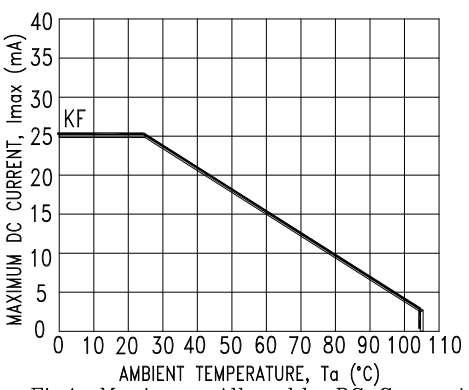


Fig4. Maximun Allowable DC Current vs. Ambient Temperature

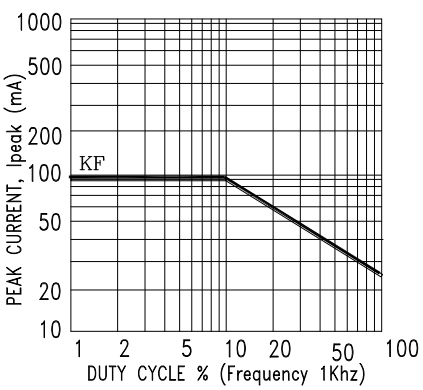


Fig5. Maximum Peak Current vs. Duty Cycle %

NOTE : KF=AlInGaP YELLOW ORANGE