

FEATURES

- * 0.4 inch (10.0-mm) DIGIT HEIGHT.
- * CONTINUOUS UNIFORM SEGMENTS.
- * LOW POWER REQUIREMENTS.
- * EXCELLENT CHARACTERS AND APPEARANCE.
- * HIGH CONTRAST.
- * HIGH BRIGHTNESS.
- * WIDE VIEWING ANGLE.
- * SOLID STATE RELIABILITY.
- * COMMON ANODE OR COMMON CATHODE MODELS.
- * CATEGORIZED FOR LUMINOUS INTENSITY.
- * EASY MOUNTING ON P.C. BOARD.

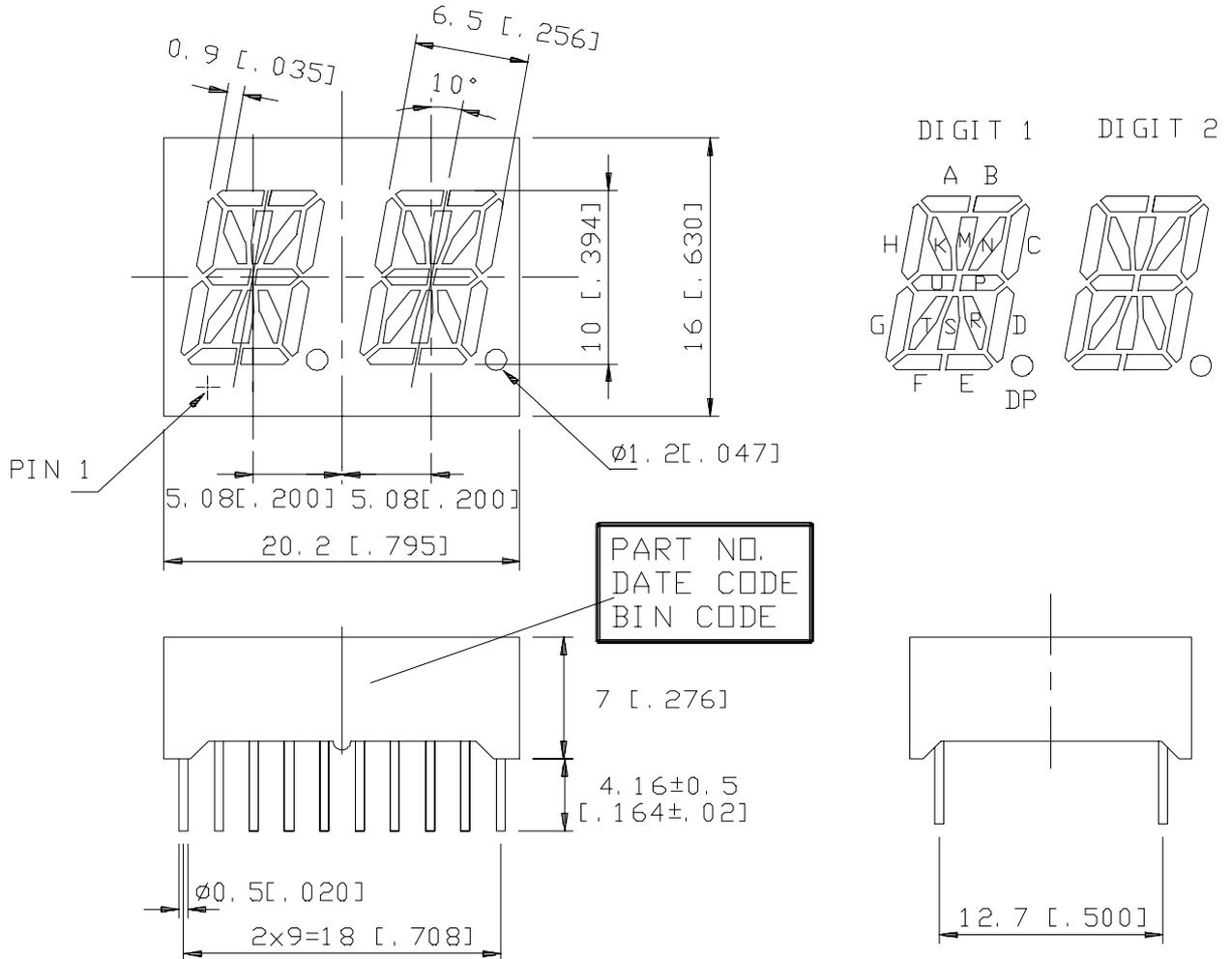
DESCRIPTION

The LTP-4823P is a 0.4 inch (10 mm) height 16-segment dual alphanumeric display. This device utilizes bright red LED chips, which are made from GaP on GaP substrate, and has a gray face and white segments.

DEVICE

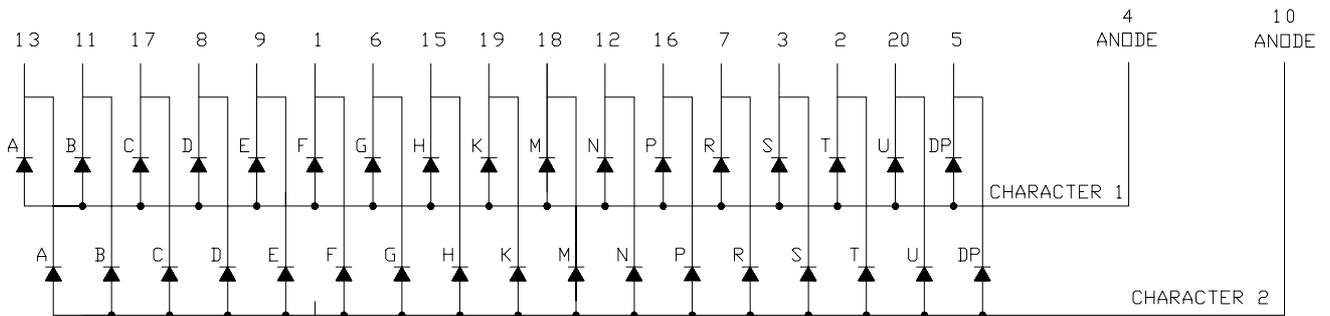
PART NO.	DESCRIPTION
BRIGHT RED	DUPLEX COMMON ANODE
LTP-4823P	RT. HAND DECIMAL

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 F
2	CATHODE T
3	CATHODE S
4	COMMON ANODE CHARACTER 1
5	CATHODE DP
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	40	mW
Peak Forward Current Per Segment	60	mA
Average Forward Current Per Segment	15	mA
Derating Linear From 25°C Per Segment	0.20	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: max 260°C for max 3sec at 1.6mm[1/16inch] below seating plane.		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	320	750		μcd	I _F =10mA
Peak Emission Wavelength	λ _p		697		nm	I _F =20mA
Spectral Line Half-Width	Δλ		90		nm	I _F =20mA
Dominant Wavelength	λ _d		657		nm	I _F =20mA
Forward Voltage Per Segment	V _F		2.1	2.6	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 =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.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

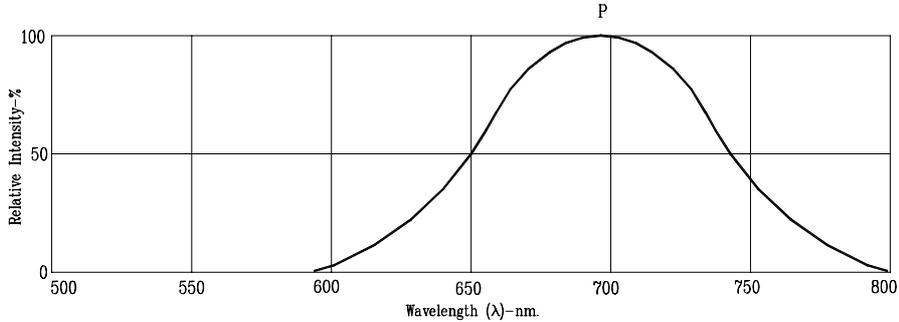


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

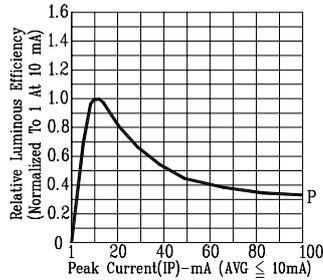


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)

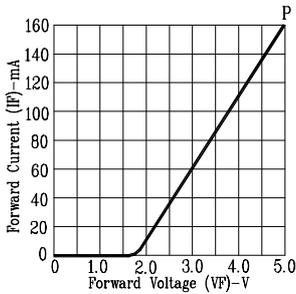


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

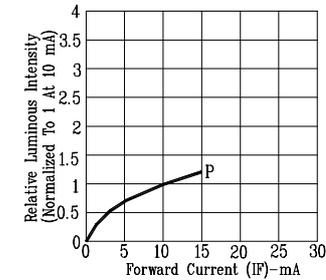


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

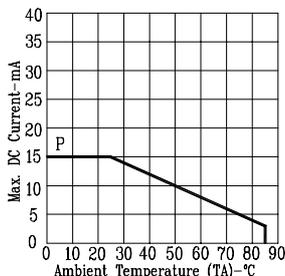


Fig5. MAX ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

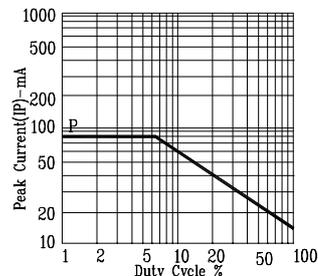


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE: P=BRIGHT RED