

FEATURES

- * 0.3 inch (7.62 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-312AP is a 0.3 inch (7.62 mm) digit height single digit seven-segment display. This device uses BRIGHT RED LED chips (GaP epi on GaP substrate). The display has a black face and red segments.

DEVICE

PART NO.	DESCRIPTION
Bright Red	Common Anode
LTS-312AP	Rt. & Lt. Hand Decimal

PIN CONNECTION

No.	CONNECTION
1	CATHODE A
2	CATHODE F
3	COMMON ANODE
4	NO PIN
5	NO PIN
6	CATHODE LDP
7	CATHODE E
8	CATHODE D
9	CATHODE RDP
10	CATHODE C
11	CATHODE G
12	NO PIN
13	CATHODE B
14	COMMON ANODE

ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	40	mW
Peak Forward Current Per Segment (Frequency 1Khz, 10% duty cycle)	60*	mA
Continuous Forward Current Per Segment	15	mA
Derating Linear From 25°C Per Segment	0.2	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 below seating plane.		

* see figure 5 to establish pulsed condition

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	340	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)

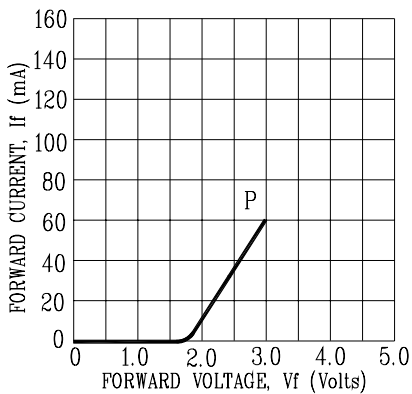
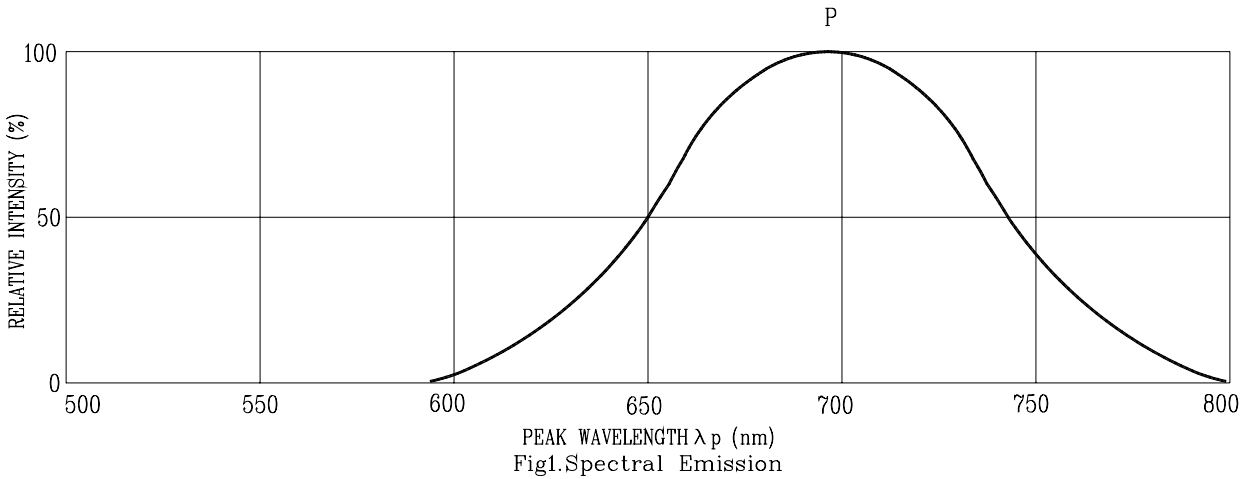


Fig2. Forward Current vs. Forward Voltage

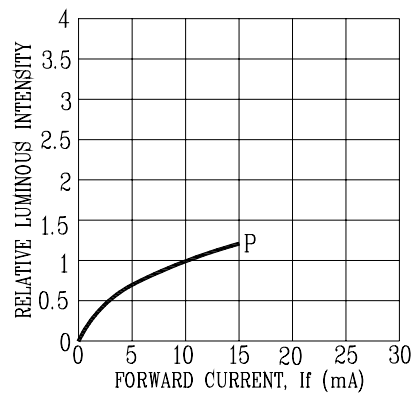


Fig3. Relative Luminous Intensity vs. DC Forward Current

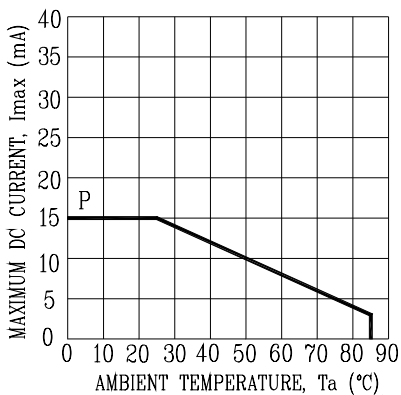


Fig4. Maximum Allowable DC Current vs. Ambient Temperature

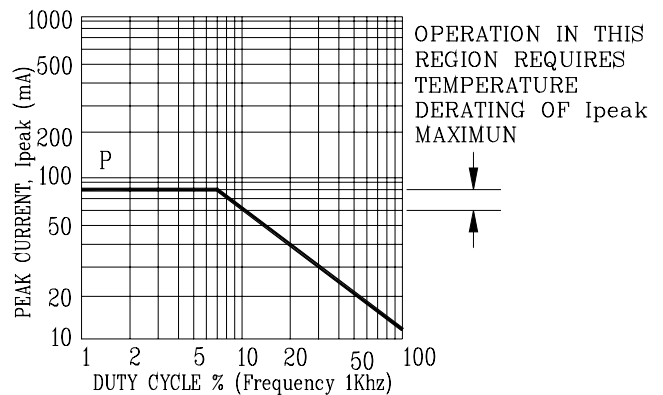


Fig5. Maximum Peak Current vs. Duty Cycle %

NOTE : P=BRIGHT RED