

**FEATURES**

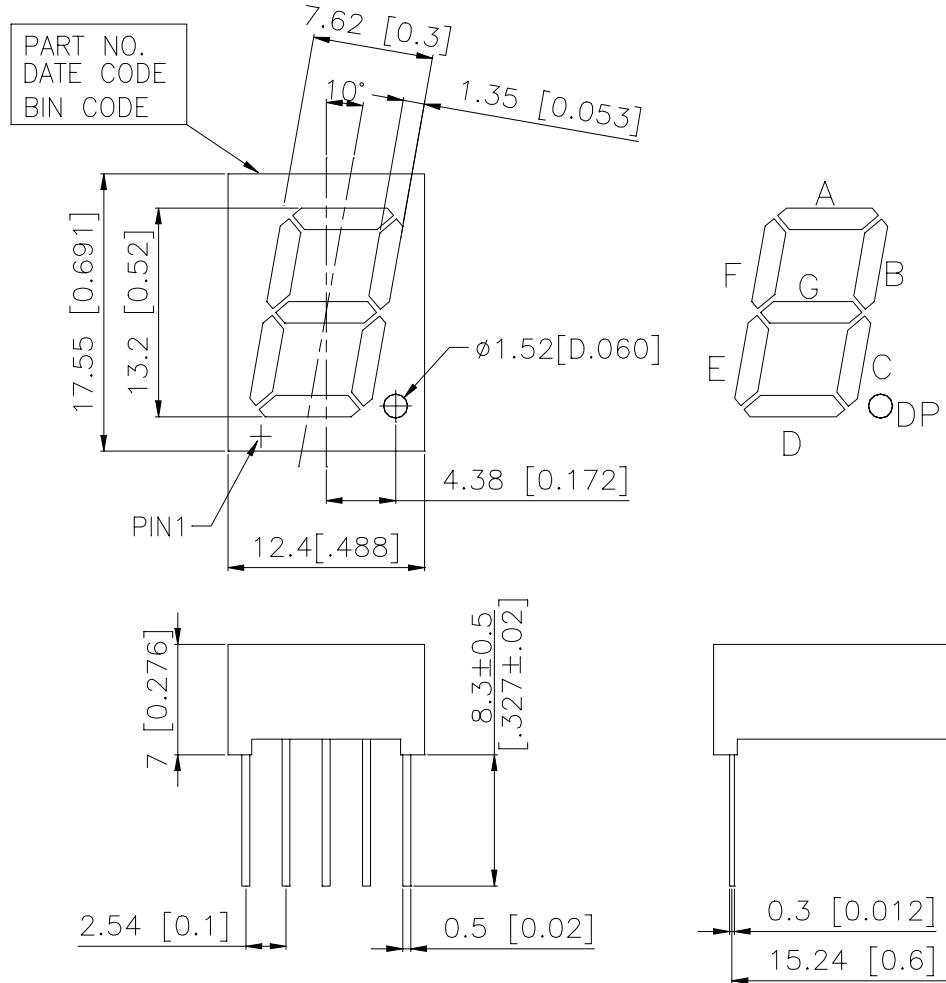
- \* 0.52 INCH (13.2 mm) DIGIT HEIGHT.
- \* CONTINUOUS UNIFORM SEGMENTS.
- \* LOW POWER REQUIREMENT.
- \* EXCELLENT CHARACTERS APPEARANCE.
- \* HIGH BRIGHTNESS & HIGH CONTRAST.
- \* WIDE VIEWING ANGLE.
- \* SOLID STATE RELIABILITY.
- \* CATEGORIZED FOR LUMINOUS INTENSITY.

**DESCRIPTION**

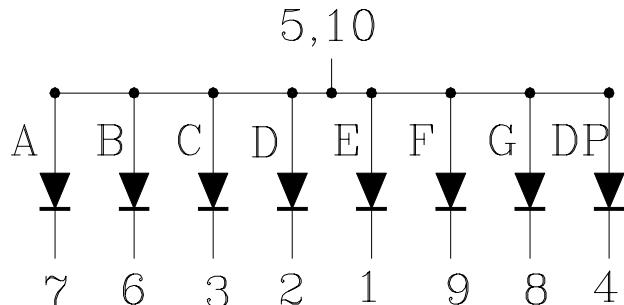
The LTS-5818Y-NB is a 0.52 inch (13.2 mm) digit height single digit seven-segment display. This device utilizes yellow LED chips, which are made from GaAsP on GaP substrate, and has a black face and white segments.

**DEVICE**

PART NO.	DESCRIPTION
YELLOW	Common Anode
LTS-5818Y-NB	Rt. Hand Decimal

**PACKAGE DIMENSIONS**

NOTES: All dimensions are in millimeters. Tolerance:  $\pm 0.25\text{-mm}$  (0.01") unless otherwise noted.

**INTERNAL CIRCUIT DIAGRAM**

**PIN CONNECTION**

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

**ABSOLUTE MAXIMUM RATING AT Ta=25°C**

<b>PARAMETER</b>	<b>MAXIMUM RATING</b>	<b>UNIT</b>
Power Dissipation Per Segment	60	mW
Peak Forward Current Per Segment ( 1/10 Duty Cycle, 0.1ms Pulse Width )	80	mA
Continuous Forward Current Per Segment	20	mA
Derating Linear From 25°C Per Segment	0.27	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**

<b>PARAMETER</b>	<b>SYMBOL</b>	<b>MIN.</b>	<b>TYP.</b>	<b>MAX.</b>	<b>UNIT</b>	<b>TEST CONDITION</b>
Average Luminous Intensity	I <sub>v</sub>	800	2400		μcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λ <sub>p</sub>		585		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		35		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		588		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	V <sub>F</sub>		2.1	2.6	V	I <sub>F</sub> =20mA
Reverse Current Per Segment	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V
Luminous Intensity Matching Ratio	I <sub>v-m</sub>			2:1		I <sub>F</sub> =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)

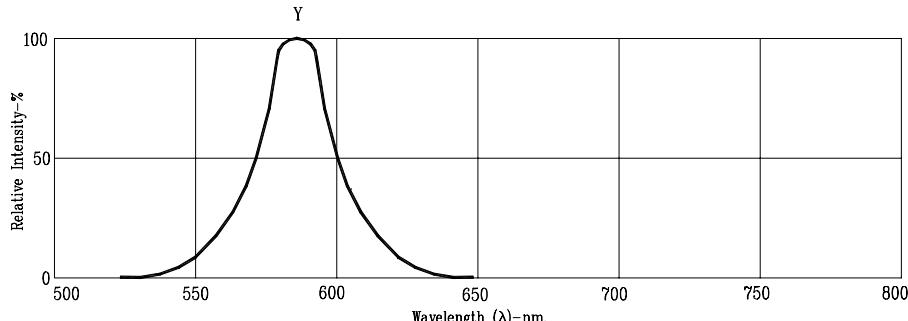
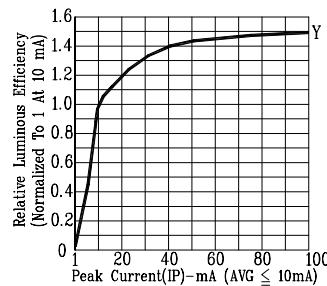
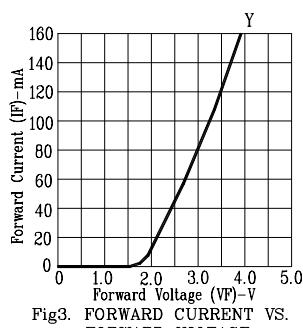
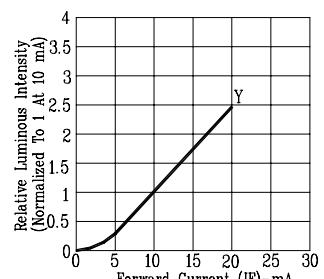
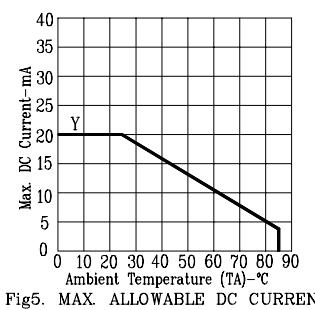
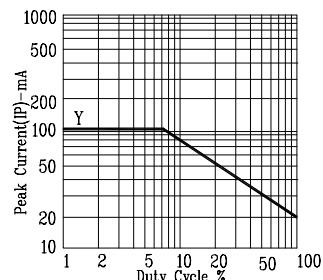


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

Fig2. RELATIVE LUMINOUS EFFICIENCY  
(LUMINOUS INTENSITY PER UNIT  
CURRENT) VS. PEAK CURRENT  
(REFRESH RATE 1KHz)Fig3. FORWARD CURRENT VS.  
FORWARD VOLTAGEFig4. RELATIVE LUMINOUS INTENSITY  
VS. FORWARD CURRENTFig5. MAX. ALLOWABLE DC CURRENT  
VS. AMBIENT TEMPERATURE.Fig6. MAX. PEAK CURRENT VS.  
DUTY CYCLE %  
(REFRESH RATE 1KHz)

NOTE : Y=YELLOW