

FEATURES

- * 0.3 inch (7.62 mm) DIGIT HEIGHT
- * EXCELLENT SEGMENT UNIFORMITY
- * LOW POWER REQUIREMENT
- * HIGH BRIGHTNESS AND HIGH CONTRAST
- * WIDE VIEWING ANGLE
- * SOLID STATE RELIABILITY
- * BINNED FOR LUMINOUS INTENSITY

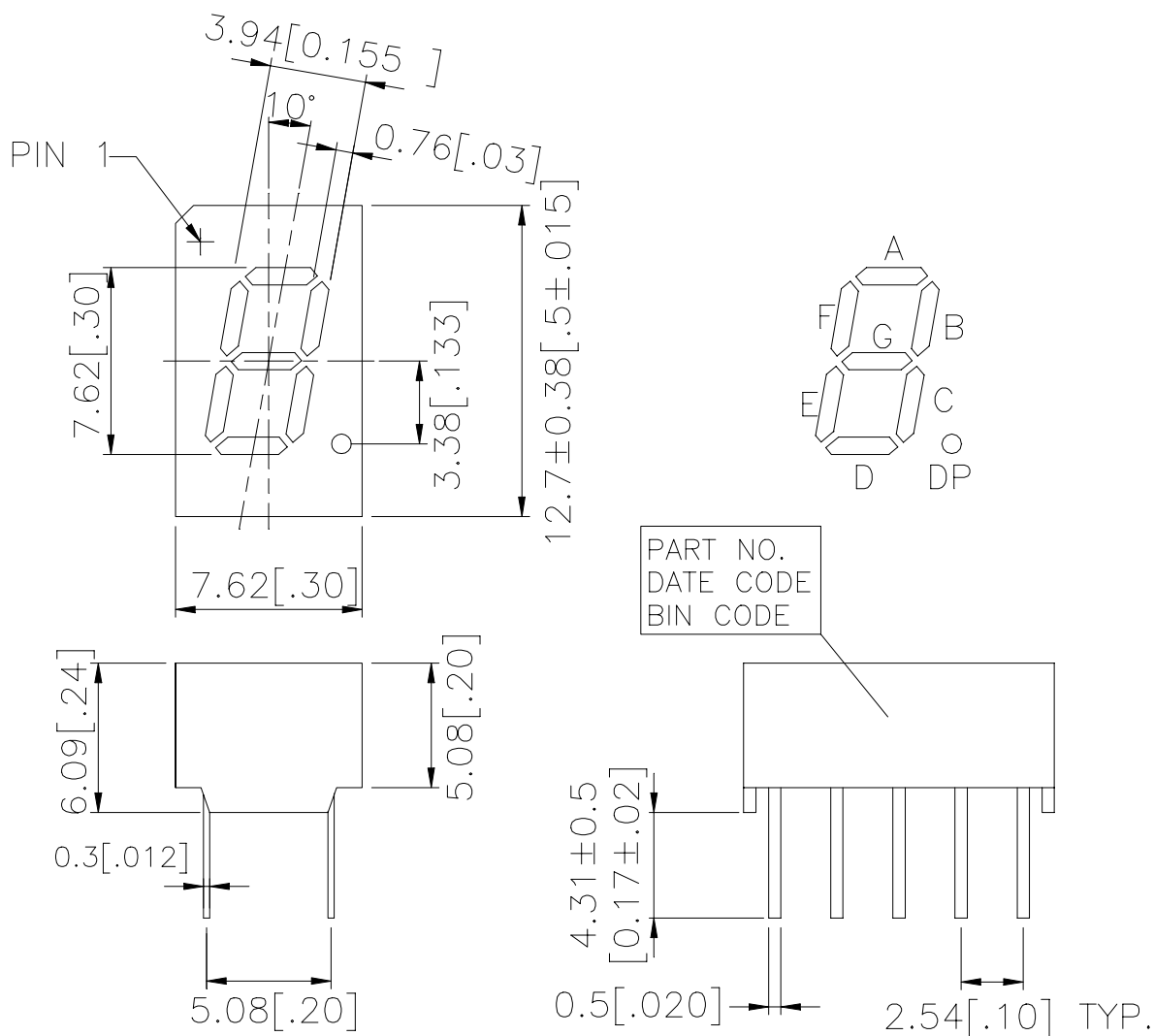
DESCRIPTION

The LSHD-7803 is a 0.3 inch (7.62 mm) digit height single-digit display. This device uses GREEN LED chips (GaP epi on GaP substrate). The display has gray face and green segments.

DEVICE

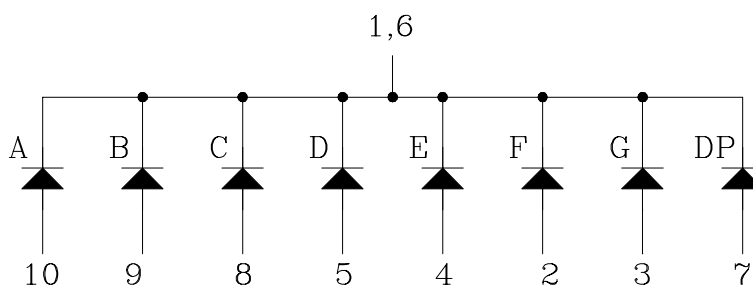
PART NO.	DESCRIPTION
GREEN	Common Cathode
LSHD-7803	Rt. Hand Decimal

PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

No.	CONNECTION
1	Common Cathode
2	Anode F
3	Anode G
4	Anode E
5	Anode D
6	Common Cathode
7	Anode DP
8	Anode C
9	Anode B
10	Anode A

ABSOLUTE MAXIMUM RATING AT Ta = 25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	75	mW
Peak Forward Current Per Segment (Frequency 1Khz, 2% duty cycle)	310	mA
Continuous Forward Current Per Segment	25	mA
Forward Current Derating from 25°C	0.28	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +105°C	
Storage Temperature Range	-35°C to +105°C	
Soldering Conditions : 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 Per Segment	I _v	500	1600		μcd	I _F = 10mA
Peak Emission Wavelength	λ _p		565		nm	I _F = 20mA
Spectral Line Half-Width	Δλ		30		nm	I _F = 20mA
Dominant Wavelength	λ _d		569		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)

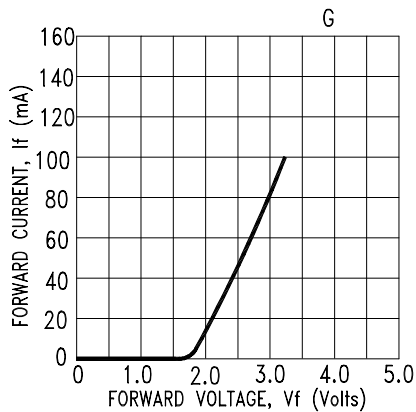
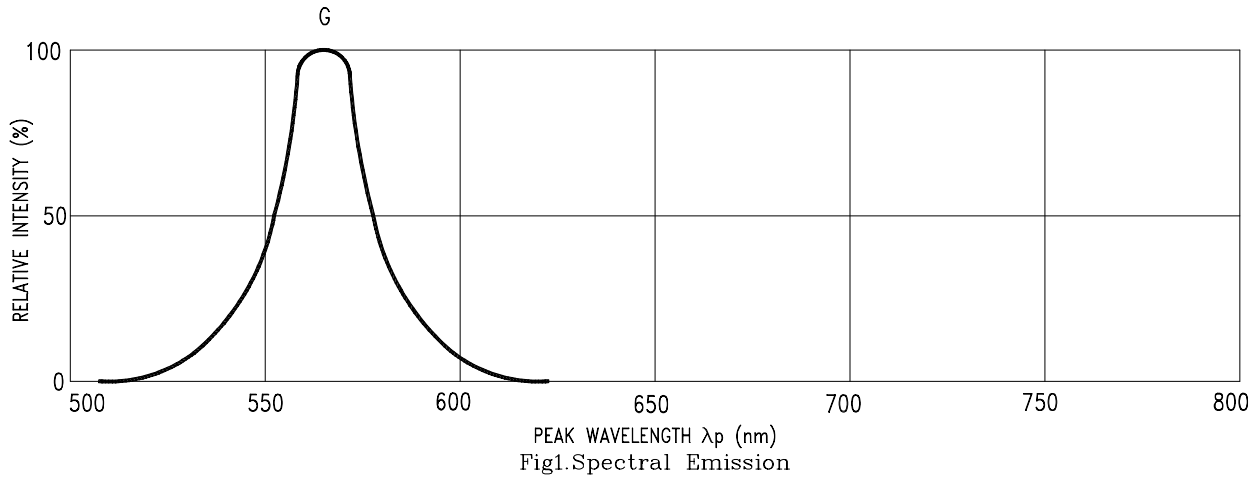


Fig2. Forward Current vs. Forward Voltage

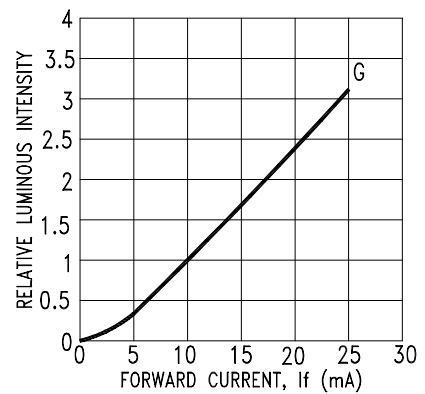


Fig3. Relative Luminous Intensity vs. DC Forward Current

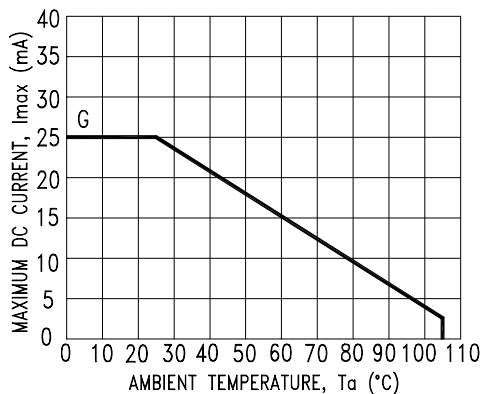


Fig4. Maximum Allowable DC Current vs. Ambient Temperature

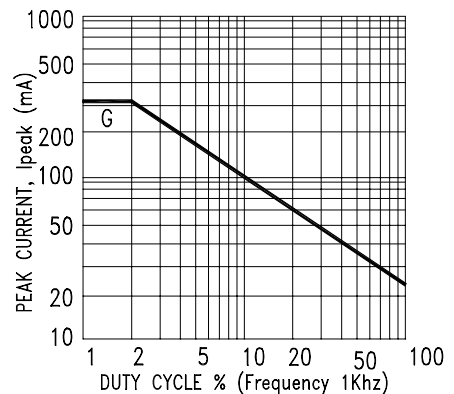


Fig5. Maximum Peak Current vs. Duty Cycle %

NOTE: G=GREEN.