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
∗**LEAD-FREE PACKAGE**

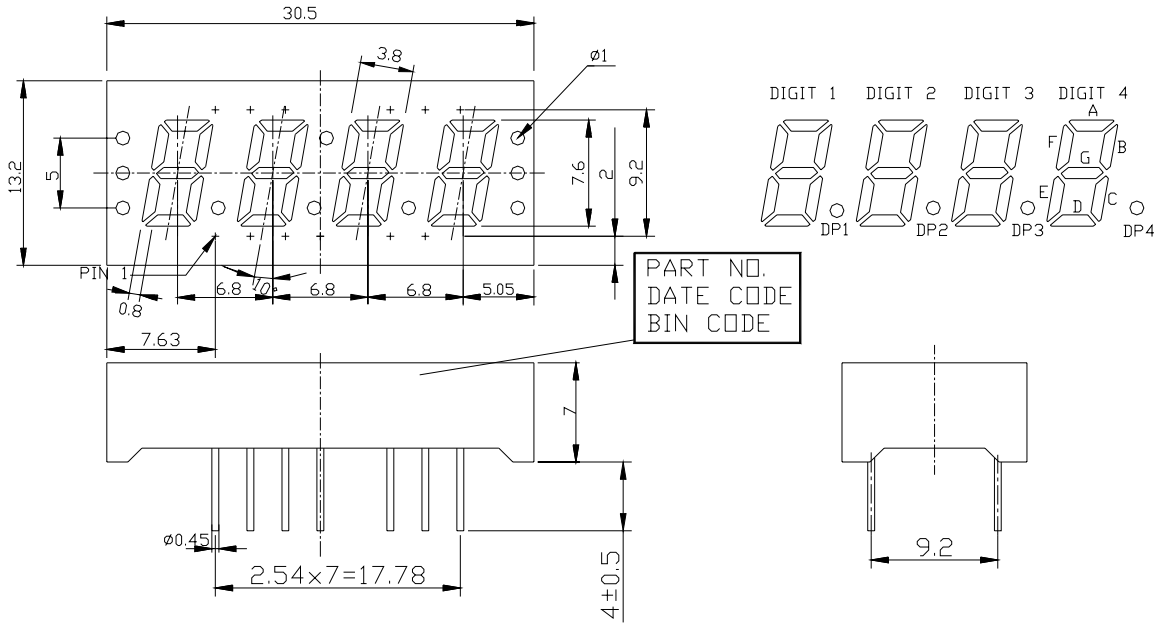
DESCRIPTION

The LTC-3757WC-J is a 0.3inch (7.62mm) digit height quadruple digit seven-segment display. This device uses bright AlGaAs red LED chips(AlGaAs epi on GaAs substrate). The display has a black face and red segments.

DEVICE

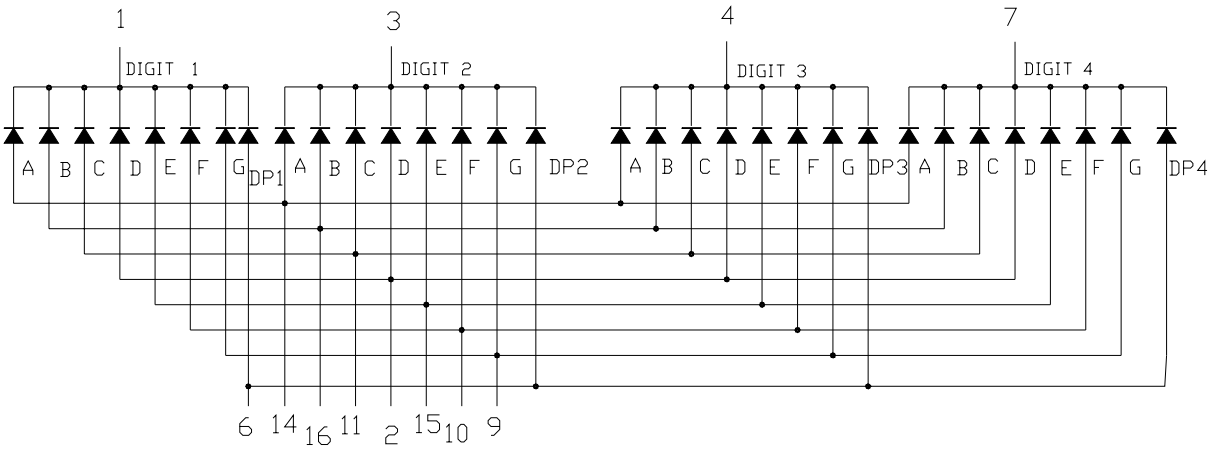
PART NO.	DESCRIPTION
AlGaAs red	Multiplex Common Cathode
LTC-3757WC-J	Rt. Hand Decimal

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	NO	CONNECTION
1	COMMON CATHODE DIGIT 1	13	NO PIN
2	COMMON ANODE D	14	COMMON ANODE A
3	COMMON CATHODE DIGIT 2	15	COMMON ANODE E
4	COMMON CATHODE DIGIT 3	16	COMMON ANODE B
5	NO PIN		
6	COMMON ANODE (DP1, DP2, DP3 DP4)		
7	COMMON CATHODE DIGIT 4		
8	NO PIN		
9	COMMON ANODE G		
10	COMMON ANODE F		
11	COMMON ANODE C		
12	NO PIN		

ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	75	mW
Peak Forward Current Per Segment (Frequency 1Khz, 10% duty cycle)	125*	mA
Continuous Forward Current Per Segment	30	mA
Forward Current Derating from 25^0C	0.4	mA/℃
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35℃ to +105℃	
Storage Temperature Range	-35℃ to +105℃	
Solder Temperature: max 260℃ 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	200	600		μcd	I_F=1mA
Peak Emission Wavelength	λp		660		nm	I_F=20mA
Spectral Line Half-Width	Δλ		35		nm	I_F=20mA
Dominant Wavelength	λd		638		nm	I_F=20mA
Forward Voltage Per Segment	V_F		1.8	2.4	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=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.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

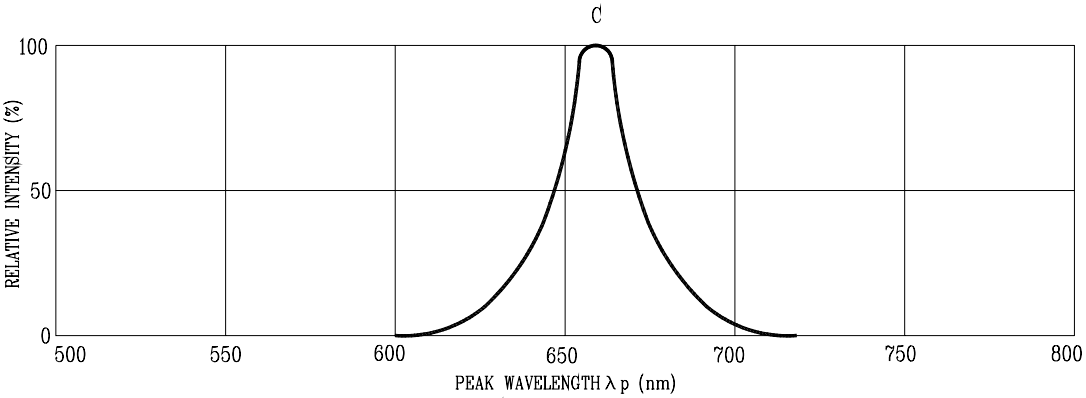


Fig1.Spectral Emission

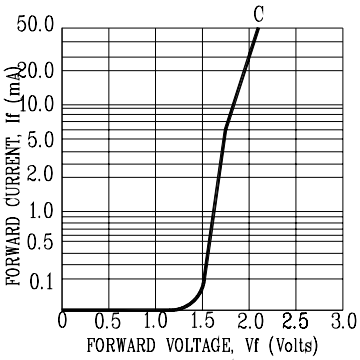
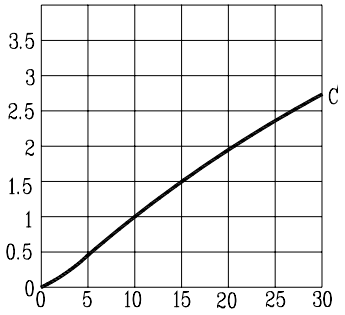


Fig2. Forward Current vs. Forward Voltage



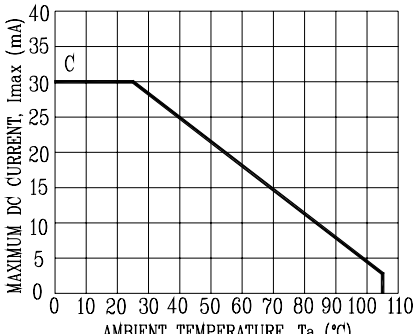


Fig4. Maximun Allowable DC Current vs. Ambient Temperature

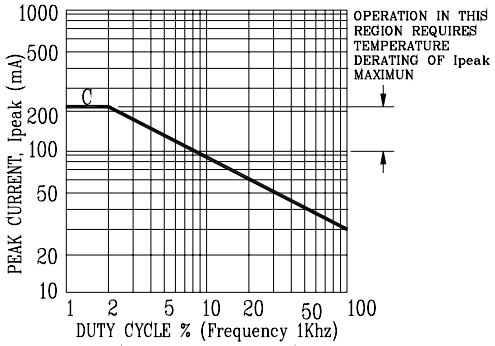


Fig5. Maximum Peak Current vs. Duty Cycle %

NOTE: C=AlGaAs RED