

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

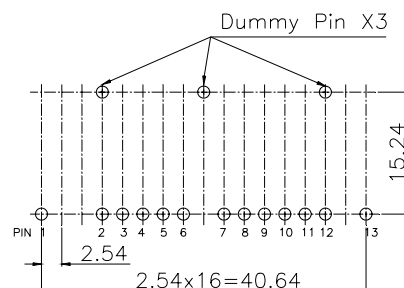
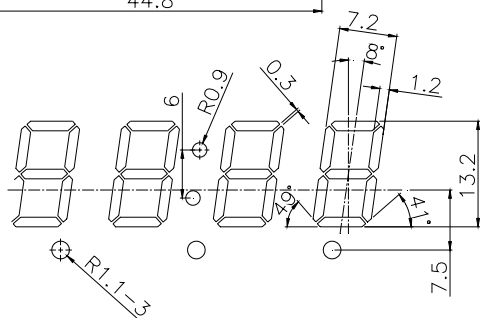
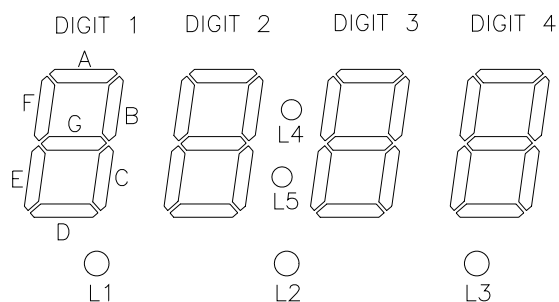
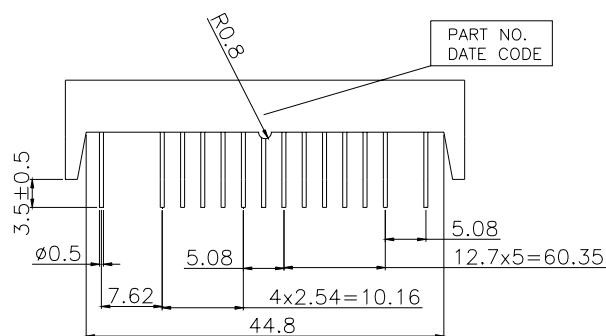
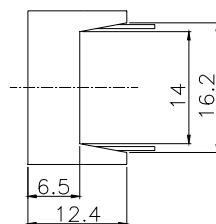
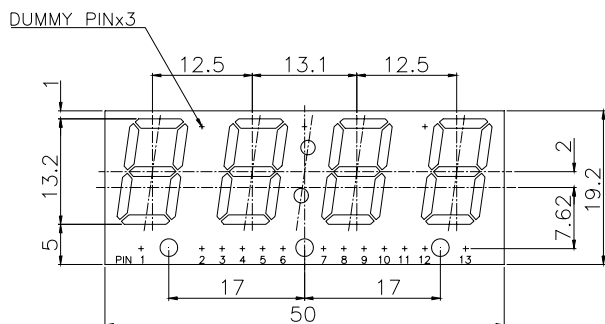
The LTC-5673WC-03 is a 0.52 inch (13.2 mm) digit height quad digit seven-segment display. This device uses AlGaAs RED LED chips (AlGaAs epi on GaAs substrate). The display has black face and red segments. The AlGaAs red seven segment displays are designed for applications requiring low power consumption. They are tested and selected for the excellent low current characteristics to ensure that the segments are matched at low current. Drive current as low as 1 mA per segment is available.

DEVICE

PART NO.	DESCRIPTION
AlGaAs Red	Multiplex Common Anode
LTC-5673WC-03	

Property of Lite-On Only

PACKAGE DIMENSIONS



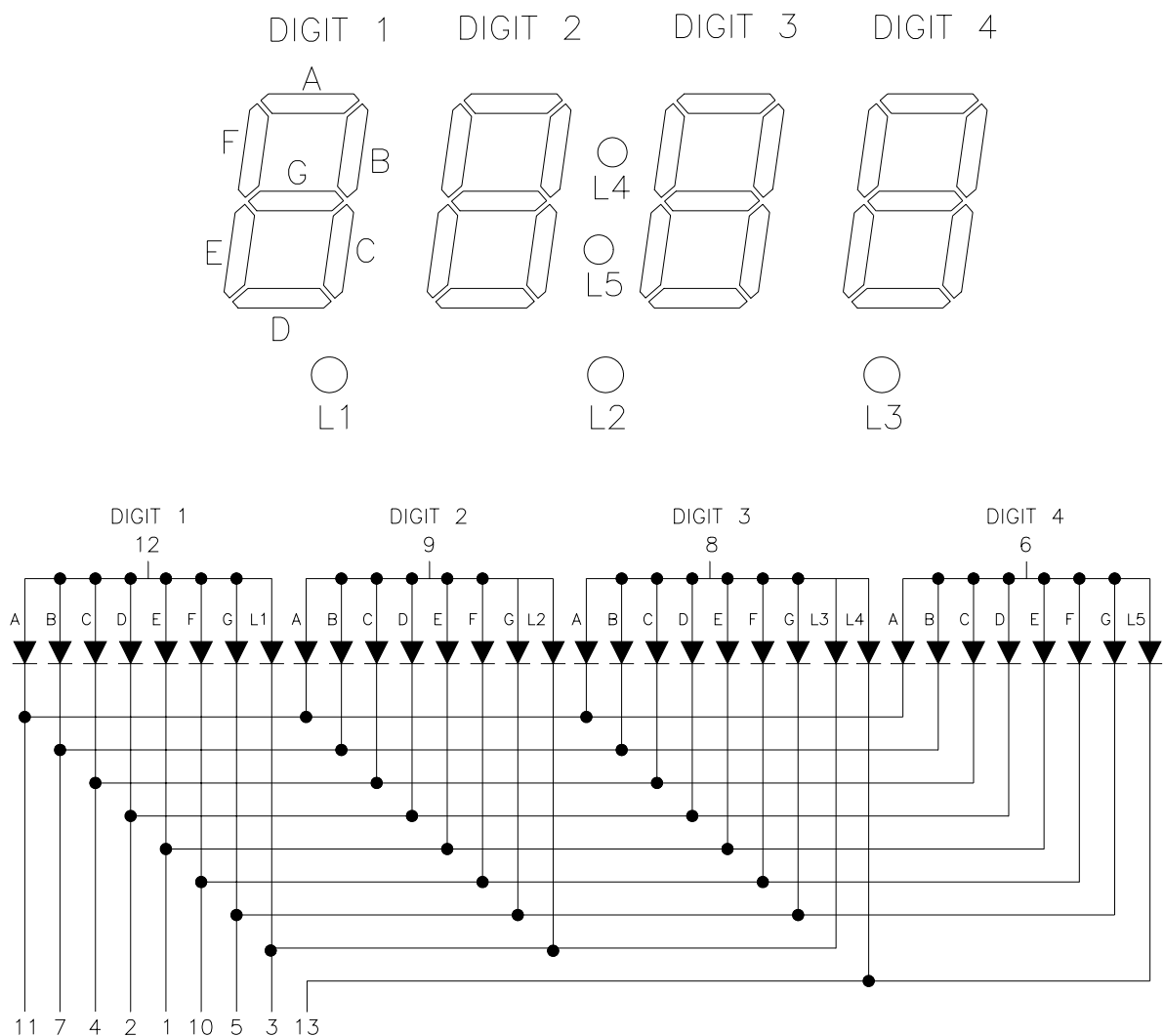
NOTES: All dimensions are in millimeters. Tolerances are ± 0.25 mm (0.01") unless otherwise noted.

PART NO.: LTC-5673WC-03(FOR BSG & EGO & REMCO ONLY)

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Property of Lite-On Only

INTERNAL CIRCUIT DIAGRAM



THE SIGN "  " IS STANDARD FOR LOW CURRENT RED CHIPS.

PIN CONNECTION

No	CONNECTION
1	CATHODE E (DIGIT 1 ~ 4)
2	CATHODE D (DIGIT 1 ~ 4)
3	CATHODE L1 , L2 , L3
4	CATHODE C (DIGIT 1 ~ 4)
5	CATHODE G (DIGIT 1 ~ 4)
6	COMMON ANODE DIGIT 4 , L5
7	CATHODE B (DIGIT 1 ~ 4)
8	COMMON ANODE DIGIT 3 , L3 ,L4
9	COMMON ANODE DIGIT 2 , L2
10	CATHODE F (DIGIT 1 ~ 4)
11	CATHODE A (DIGIT 1 ~ 4)
12	COMMON ANODE DIGIT 1 , L1
13	CATHODE L4 , L5

ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	75	mW
Peak Forward Current Per Segment (Frequency 1Khz, 25% duty cycle)	125*	mA
Continuous Forward Current Per Segment	30	mA
Forward Current Derating from 25 ⁰ C	0.4	mA/
Reverse Voltage Per Segment	8	V
Operating Temperature Range	-35 to +85	
Storage Temperature Range	-35 to +85	
Soldering Conditions : 1/16 inch below seating plane for 3 seconds at 260 ⁰ C		

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ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25⁰C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	I _v		650		μcd	I _F =1mA
			3400		μcd	I _F =5mA
Peak Emission Wavelength	λ _p		660		nm	I _F =20mA
Spectral Line Half-Width	Δλ		35		nm	I _F =20mA
Dominant Wavelength	λ _d		638		nm	I _F =20mA
Forward Voltage Per Segment	V _F		1.6	2.4	V	I _F =1mA
			1.7			I _F =5mA
			1.8			I _F =20mA
Reverse Current Per Segment	I _R			2	μA	V _R =8V
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.

(V_R =8V, I_R=2uA is based on basic load)

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

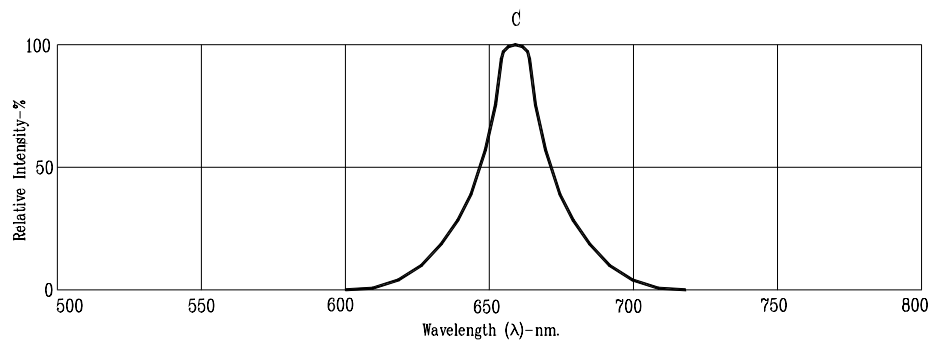


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

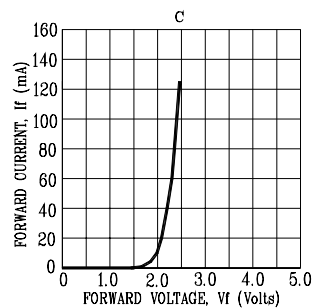


Fig2. Forward Current vs. Forward Voltage

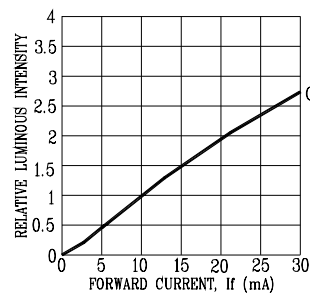


Fig3. Relative Luminous Intensity vs. DC Forward Current

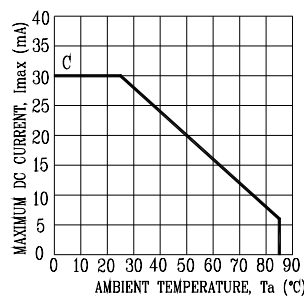


Fig4. Maximum Allowable DC Current vs. Ambient Temperature

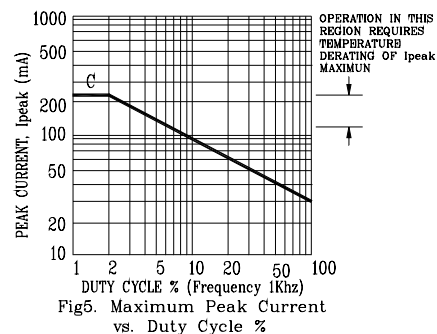


Fig5. Maximum Peak Current vs. Duty Cycle %

NOTE: C= AlGaAs RED