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

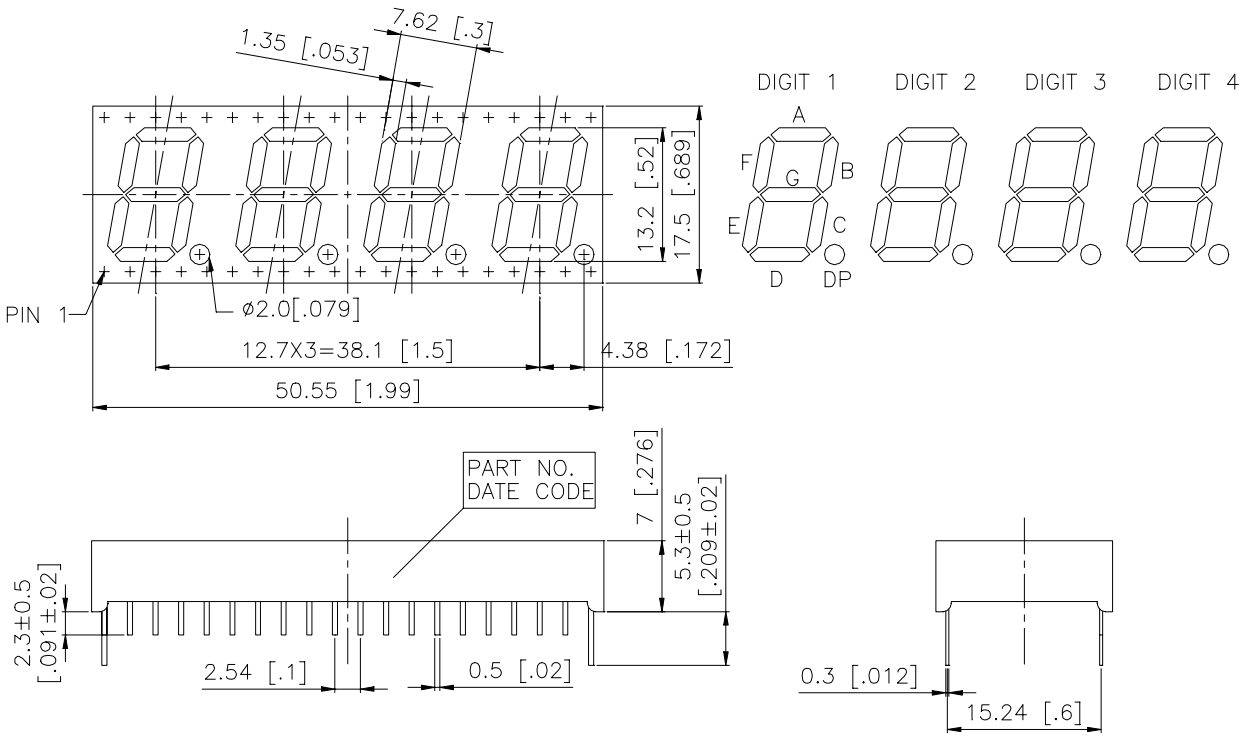
The LTC-5675WS is a 0.52 inch (13.2 mm) digit height quadruple digit low current seven-segment display. This device utilizes low current AlGaAs red LED chips, which are made from AlGaAs on a non-transparent GaAs substrate, and has a gray face and white segments.

This low current seven-segment display is designed to perform under low power consumption. It is tested and selected for it's excellent low current characteristics. It can be driven in low current condition and the segments are matched. This driving current as low as 2mA per segment is applicable.

DEVICE

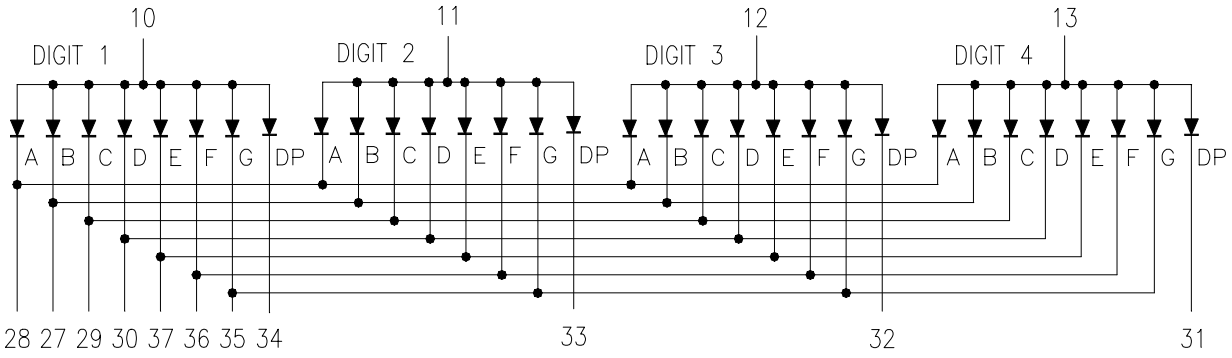
PART NO.	DESCRIPTION
AlGaAs RED	Common Anode
LTC-5675WS	Rt. Hand Decimal

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	NO CONNECTION	21	NO CONNECTION
2	NO CONNECTION	22	NO CONNECTION
3	NO CONNECTION	23	NO CONNECTION
4	NO CONNECTION	24	NO CONNECTION
5	NO CONNECTION	25	NO CONNECTION
6	NO CONNECTION	26	NO CONNECTION
7	NO CONNECTION	27	CATHODE B
8	NO CONNECTION	28	CATHODE A
9	NO CONNECTION	29	CATHODE C
10	COMMON ANODE DIGIT 1	30	CATHODE D
11	COMMON ANODE DIGIT 2	31	CATHODE DP (DIGIT 4)
12	COMMON ANODE DIGIT 3	32	CATHODE DP (DIGIT 3)
13	COMMON ANODE DIGIT 4	33	CATHODE DP (DIGIT 2)
14	NO CONNECTION	34	CATHODE DP (DIGIT 1)
15	NO CONNECTION	35	CATHODE G
16	NO CONNECTION	36	CATHODE F
17	NO CONNECTION	37	CATHODE E
18	NO CONNECTION	38	NO CONNECTION
19	NO CONNECTION	39	NO CONNECTION
20	NO CONNECTION	40	NO CONNECTION

ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	75	mW
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	125	mA
Continuous Forward Current Per Segment Derating Linear From 25℃ Per Segment	30 0.4	mA mA/℃
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35℃ to +85℃	
Storage Temperature Range	-35℃ to +85℃	
Solder Temperature: max 260℃ for max 3sec at 1.6mm[1/16inch] below seating plane.		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V	320	700		μcd	I_F=2mA
			1800		μcd	I_F=5mA
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		1.6	2.4	V	I_F=1mA
			1.7			I_F=5mA
			1.8			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=2mA

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)

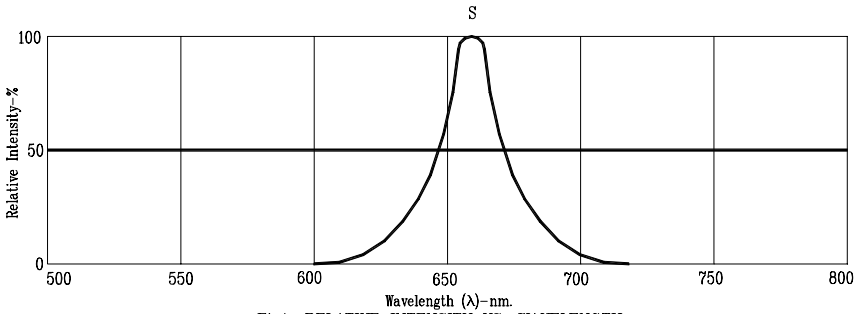


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

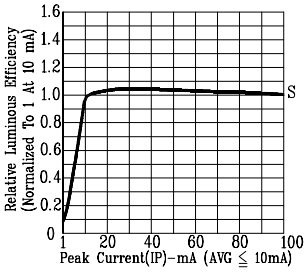


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)

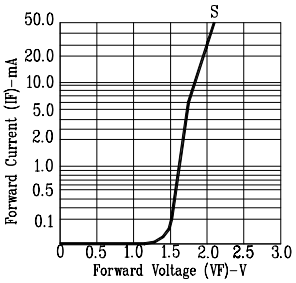


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

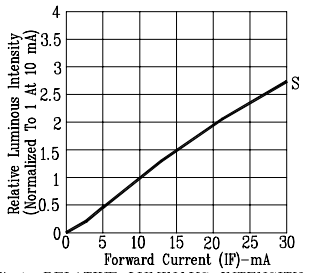


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

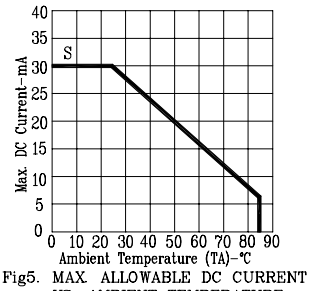


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

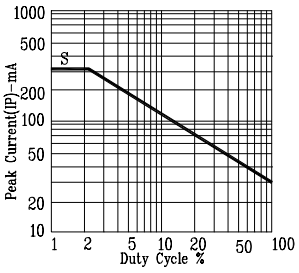


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE: S=AlGaAs RED