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FEATURES

- *0.5 inch (12.7 mm) DIGIT HEIGHT
- *CONTINUOUS UNIFORM SEGMENTS
- ***LOW POWER REQUIREMENT**
- *EXCELLENT CHARACTERS APPEARANCE
- *HIGH BRIGHTNESS & HIGH CONTRAST
- *WIDE VIEWING ANGLE
- *** SOLID STATE RELIABILITY**

DESCRIPTION

The LTC-5665AG is a 0.5 inch (12.7 mm) digit height quadruple digit seven-segment display. This device uses GREEN LED chips (GaP epi on GaP substrate). The display has a black face and white segments.

DEVICE

PART NO.	DESCRIPTION			
GREEN	M 16: 1 C A 1			
LTC-5665AG	Multiplex Common Anode			

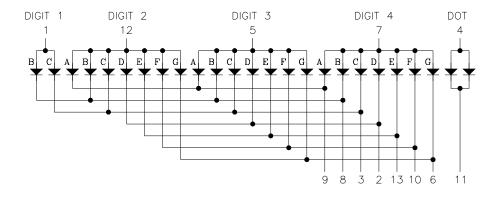
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PACKAGE DIMENSIONS 7.3 [.287] 1.2 [.047] PIN6 PIN13 DIGIT 1 DIGIT 2 DIGIT 3 DIGIT 4 [.5] 12.7 [.236] PIN5 3.25 [.128] 11.4 [.449] 10.3 [.406] 12.7 [.5] 7.4 [.291] 40 [1.575] 5 [.197] 20.5 [.807] RO.5 (R.02) 32 [1.26] 4 [.157] 3.85±0.5 [0.152±0.02] 28 [1.102] Ø0.6 [.024] [.087] 7.85±0.5 [.309±.02] [.152] 3 [.118] 2.54X8=20.32 [.8] 15 [.591] 0.5 [.02] 1.65 1.2 [.047] 2.2 [.087 NOTES: All dimensions are in millimeters. Tolerances are \pm 0.25mm (0.01") unless otherwise noted.

INTERNAL CIRCUIT DIAGRAM



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PIN CONNECTION

No	CONNECTION			
1	Common Anode (Digit 1)			
2	Cathode D			
3	Cathode C			
4	Common Anode (Dot)			
5	Common Anode (Digit 3)			
6	Cathode G			
7	Common Anode (Digit 4)			
8	Cathode B			
9	Cathode A			
10	Cathode F			
11	Cathode Dot			
12	Common Anode (Digit 2)			
13	Cathode E			

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ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT				
Power Dissipation Per Segment	75	mW				
Peak Forward Current Per Segment (Frequency 1Khz, 10% duty cycle)	100*	mA				
Continuous Forward Current Per Segment	25	mA				
Forward Current Derating from 25 ^o C	0.33	mA/ ⁰ C				
Reverse Voltage Per Segment	5	V				
Operating Temperature Range	-35° C to $+85^{\circ}$ C					
Storage Temperature Range -35°C to +85°C						
Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260°C						

^{*} 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 Per Segment	Iv	800	2200		μcd	$I_F = 10 \text{mA}$
Peak Emission Wavelength	λр		565		nm	$I_F = 20 \text{mA}$
Spectral Line Half-Width	Δλ		30		nm	$I_F = 20 \text{mA}$
Dominant Wavelength	λd		569		nm	$I_F = 20 \text{mA}$
Forward Voltage Per Segment	V_{F}		2.1	2.6	V	$I_F = 20 \text{mA}$
Reverse Current Per Segment	Ir			100	μΑ	$V_R = 5V$
Luminous Intensity Matching Ratio	Iv-m			2:1		$I_F = 10 \text{mA}$

Note: Luminous Intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

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TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES (25°C Ambient Temperature Unless Otherwise Noted) G 100 8 RELATIVE INTENSITY 550 600 750 800 500 700 650 PEAK WAVELENGTH λp (nm) Fig1.Spectral Emission 160 140 3.5 G 3 G 2.5 20 0 6 1.0 2.0 3.0 4.0 FORWARD VOLTAGE, Vf (Volts) 20 15 FORWARD CURRENT, If (mA) Fig2. Forward Current vs. Relative Luminous Intensity Forward Voltage vs. DC Forward Current OPERATION IN THIS REGION REQUIRES TEMPERATURE DERATING OF IPEAK MAXIMUN 1000 500) € 35 호 200 PEAK CURRENT, IPEGA 2001 10 10 20 30 40 50 60 70 80 90 AMBIENT TEMPERATURE, To (°C) Fig4. Maximun Allowable DC Current Fig5. Maximum Peak Current vs. Ambient Temperature vs. Duty Cycle % NOTE: G=GREEN.

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