FEATURES

* 0.56 inch (14.22 mm) DIGIT HEIGHT
* LOW POWER REQUIREMENT
* EXCELLENT CHARACTERS APPEARANCE
* HIGH BRIGHTNESS & HIGH CONTRAST
* WIDE VIEWING ANGLE
* SOLID STATE RELIABILITY
* BINNED FOR LUMINOUS INTENSITY
* **LEAD-FREE PACKAGE(ACCORDING TO ROHS)**

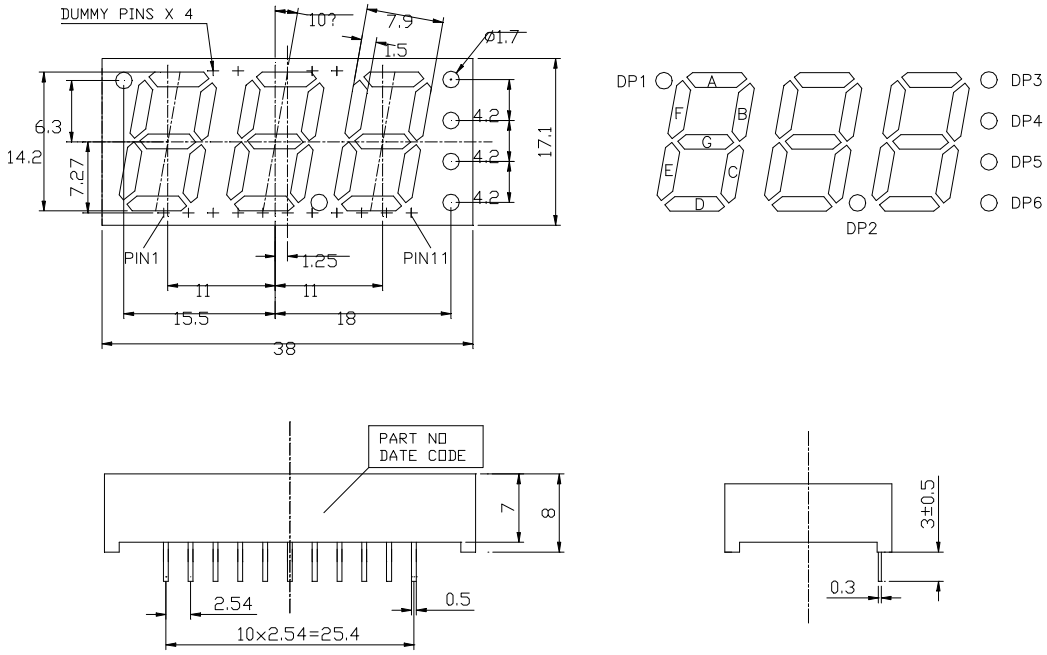
DESCRIPTION

The LTC-5685KY-S4 is a 0.56 inch (14.22 mm) digit height triple digit seven-segment display. This device uses AS-AlInGaP AMBER YELLOW LED chips (AlInGaP epi on a non-transparent GaAs substrate). The display has black face and white segments.

DEVICE

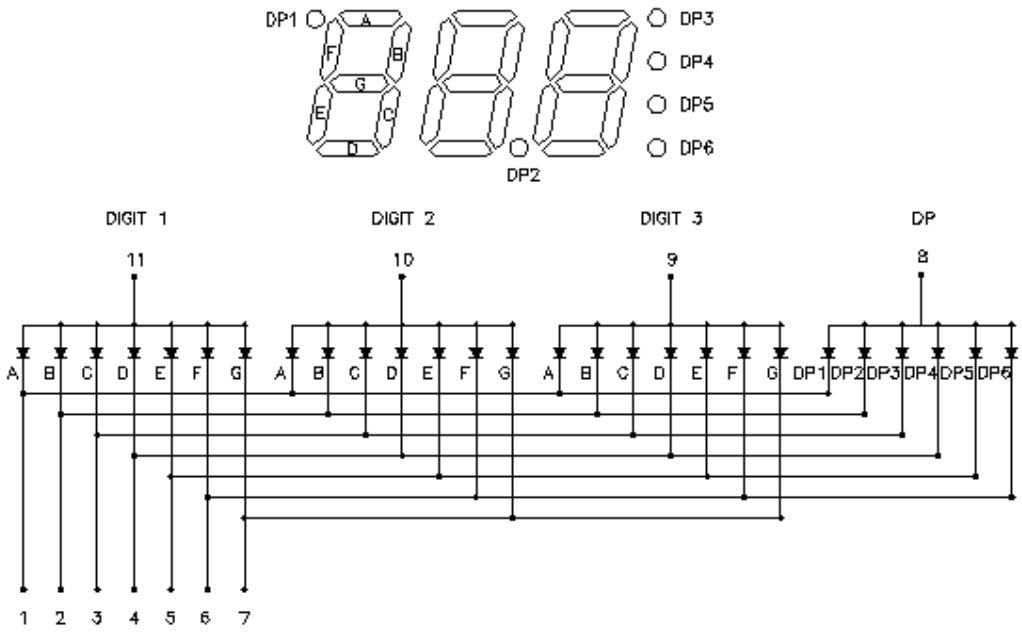
PART NO.	DESCRIPTION
AMBER YELLOW	Common Anode
LTC-5685KY-S4	Rt.Hand Decimal

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
1	CATHOD DP1,A
2	CATHOD DP2,B
3	CATHOD DP3,C
4	CATHOD DP4,D
5	CATHOD DP5,E
6	CATHOD DP6,F
7	CATHOD G
8	COMMON ANODE DIGIT4
9	COMMON ANODE DIGIT3
10	COMMON ANODE DIGIT2
11	COMMON ANODE DIGIT1

ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Chip	70	mW
Peak Forward Current Per Chip (Frequency 1Khz, 15% duty cycle)	90	mA
Continuous Forward Current Per Chip Derating Linear From 25℃ Per Chip	25 0.33	mA mA/℃
Reverse Voltage Per Chip	5	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 260^0C		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V	800	2200		μcd	I_F=1mA
Peak Emission Wavelength	λp		595		nm	I_F=20mA
Spectral Line Half-Width	Δλ		15		nm	I_F=20mA
Dominant Wavelength	λd		595		nm	I_F=20mA
Forward Voltage Per Segment	V_F		2.05	2.6	V	I_F=20mA
Reverse Current Per Segment	I_R			100	μA	V_R=5V
Luminous Intensity Matching Ratio (Similar Light Area)	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)

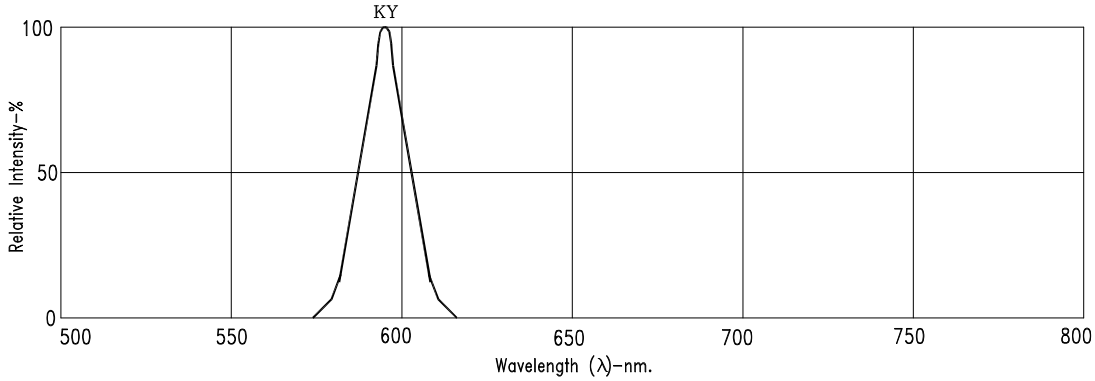


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

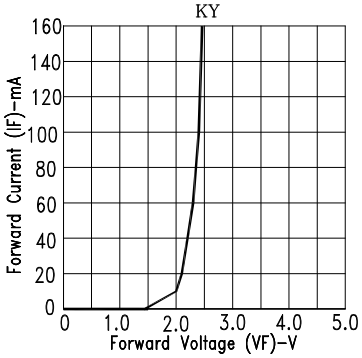


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

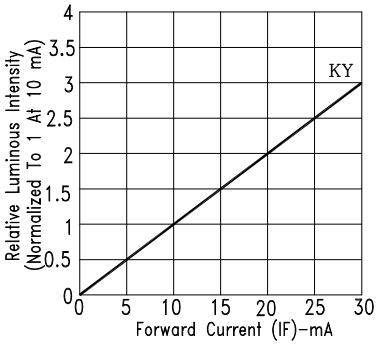


Fig3. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

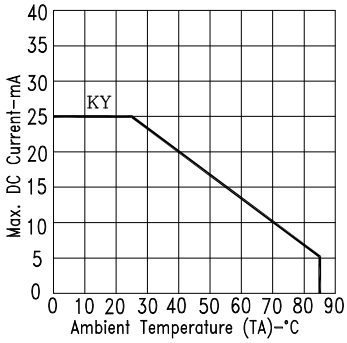


Fig4. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

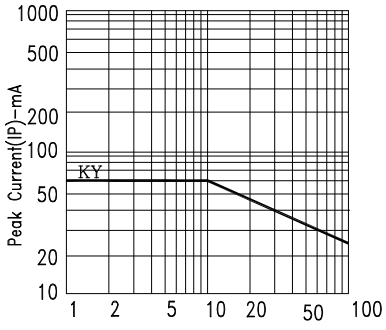


Fig5. MAX. PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE 1KHz)

NOTE : KY=AlInGaP YELLOW