



LED Display

Product Data Sheet

LTC-5836KR-07

Spec No.: DS30-2003-244

Effective Date: 11/24/2003

Revision: -

LITE-ON DCC

RELEASE

FEATURES

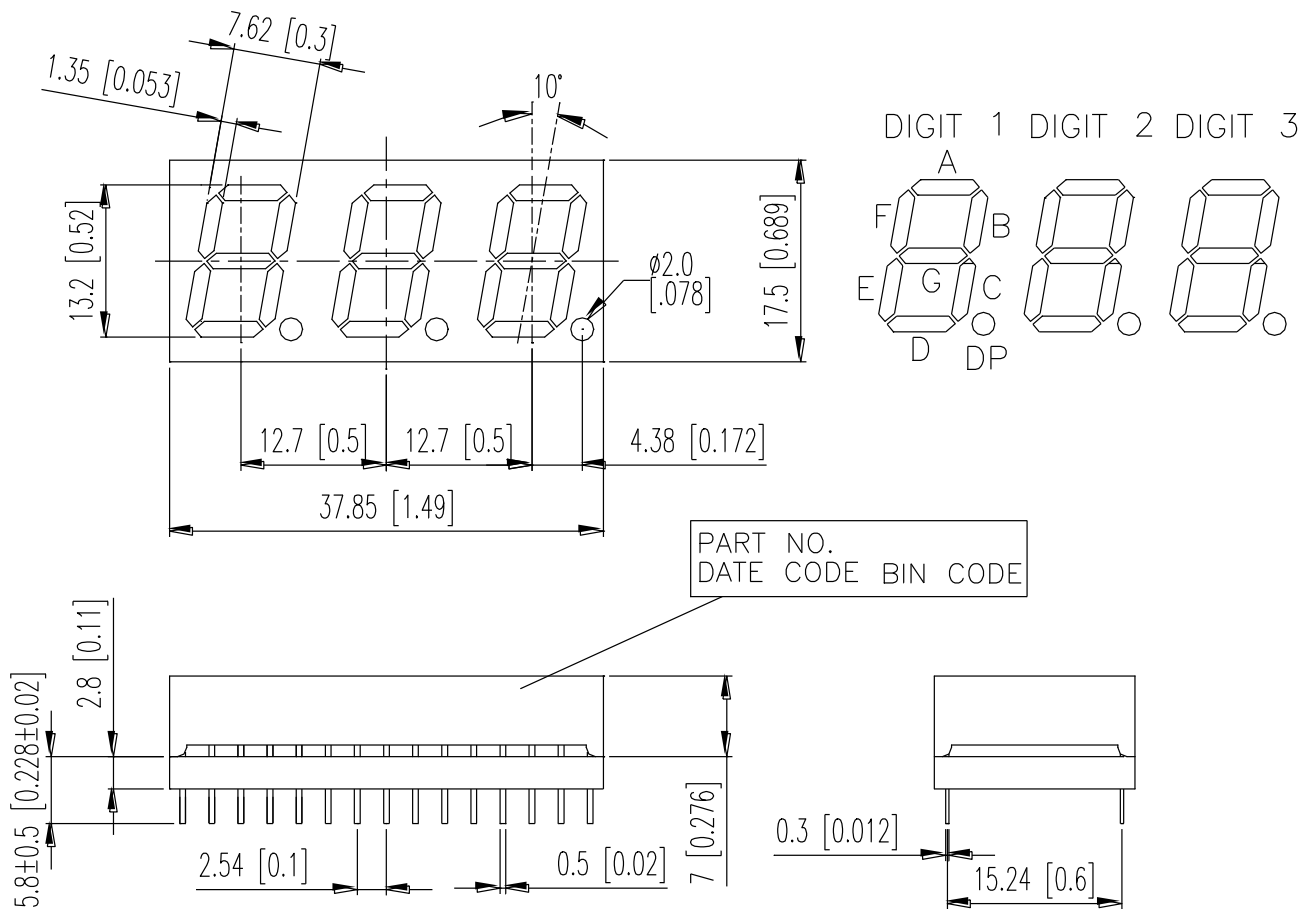
- * 0.52 inch (13.2 mm) DIGIT HEIGHT
- * EXCELLENT SEGMENT UNIFORMITY
- * LOW POWER REQUIREMENT
- * HIGH BRIGHTNESS AND HIGH CONTRAST
- * WIDE VIEWING ANGLE
- * SOLID STATE RELIABILITY
- * BINNED FOR LUMINOUS INTENSITY

DESCRIPTION

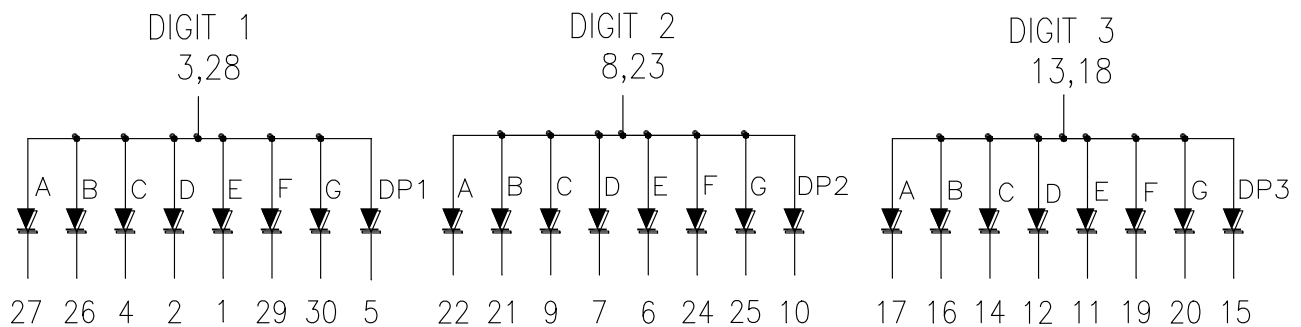
The LTC-5836KR-07 is a 0.52 inch (13.2 mm) digit height triple digit seven-segment display. This device uses AS-AlInGaP SUPER RED LED chips (AlInGaP epi on GaAs substrate), and has a gray face and white segments.

DEVICE

PART NO.	DESCRIPTION
AlInGaP SUPER RED	Common Anode Rt. Hand Decimal
LTC-5836KR-07	

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	Cathode E (Digit 1)	16	Cathode B (Digit 3)
2	Cathode D (Digit 1)	17	Cathode A (Digit 3)
3	Common Anode (Digit 1)	18	Common Anode (Digit 3)
4	Cathode C (Digit 1)	19	Cathode F (Digit 3)
5	Cathode DP (Digit 1)	20	Cathode G (Digit 3)
6	Cathode E (Digit 2)	21	Cathode B (Digit 2)
7	Cathode D (Digit 2)	22	Cathode A (Digit 2)
8	Common Anode (Digit 2)	23	Common Anode (Digit 2)
9	Cathode C (Digit 2)	24	Cathode F (Digit 2)
10	Cathode DP (Digit 2)	25	Cathode G (Digit 2)
11	Cathode E (Digit 3)	26	Cathode B (Digit 1)
12	Cathode D (Digit 3)	27	Cathode A (Digit 1)
13	Common Anode (Digit 3)	28	Common Anode (Digit 1)
14	Cathode C (Digit 3)	29	Cathode F (Digit 1)
15	Cathode DP (Digit 3)	30	Cathode G (Digit 1)

ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment (Frequency 1Khz, 10% duty cycle)	90	mA
Continuous Forward Current Per Segment	25	mA
Derating Linear From 25°C Per Segment	0.28	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +105°C	
Storage Temperature Range	-35°C to +105°C	
Solder Temperature: max 260°C 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	1050		μcd	I _F =1mA
Peak Emission Wavelength	λ _p		639		nm	I _F =20mA
Spectral Line Half-Width	Δλ		20		nm	I _F =20mA
Dominant Wavelength	λ _d		631		nm	I _F =20mA
Forward Voltage Per Segment	V _F		2.0	2.6	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)

