LED DISPLAY

LTC-2623Y-K2J
DATASHEET

Rev	Description	By
01	ORIGINAL (Refer to contour drawing Revision (-))	WARIN S. JAN 03.08
(Above data for PD and Customer tracking only)		
-	NPPR Received and Upload on OPNC	KITTISAK Mar 15.2008

SPEC. NO.: DS30-2008-0053

D A T E : Mar 15.2008

REV. NO. : -

PAGE NO. : 0 OF 5

FEATURES

∗0.28 inch (7 mm) DIGIT HEIGHT.
∗CONTINUOUS UNIFORM SEGMENTS.
∗LOW POWER REQUIREMENT.
∗EXCELLENT CHARACTERS APPEARANCE.
∗HIGH BRIGHTNESS & HIGH CONTRAST.
∗WIDE VIEWING ANGLE.
∗SOLID STATE RELIABILITY.
∗**LEAD-FREE PACKAGE(ACCORDING TO ROHS)**

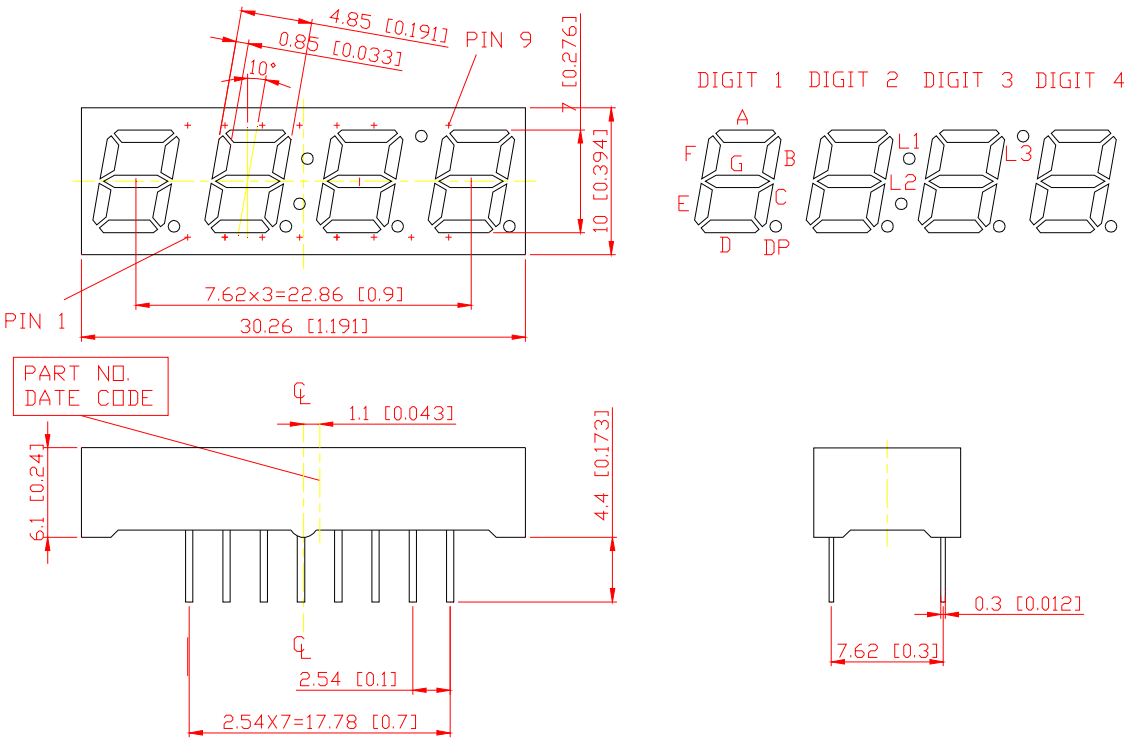
DESCRIPTION

The LTC-2623Y-K2J is a 0.28 inch (7 mm) digit height quadruple digit seven-segment display. This device utilizes yellow LED chips, which are made from GaAsP on a transparent GaP substrate, and has a gray face and white segments.

DEVICE

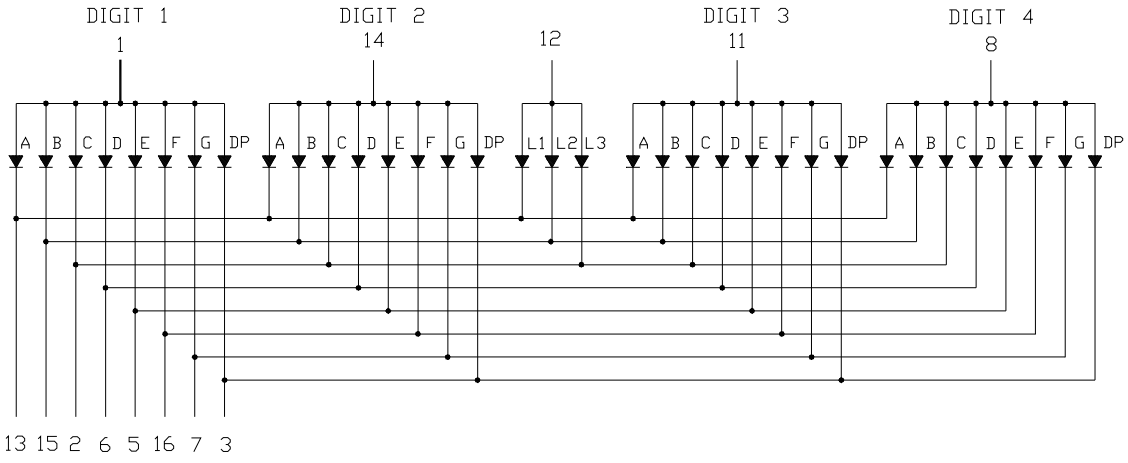
PART NO.	DESCRIPTION
Yellow LTC-2623Y-K2J	Multiplex Common Anode Rt. Hand Decimal

PACKAGE DIMENSIONS



NOTES: 1.All dimensions are in millimeters. Tolerances are± 0.25 mm (0.01“) unless otherwise noted.
2.Pin tip’s shift tolerance is ± 0.4 mm.

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

NO	CONNECTION
1	COMMON ANODE (DIGIT 1)
2	CATHODE C, L3
3	CATHODE D.P.
4	NO CONNECTION
5	CATHODE E
6	CATHODE D
7	CATHODE G
8	COMMON ANODE (DIGIT 4)
9	NO CONNECTION
10	NO PIN
11	COMMON ANODE (DIGIT 3)
12	COMMON ANODE L1, L2, L3
13	CATHODE A, L1
14	COMMON ANODE (DIGIT 2)
15	CATHODE B, L2
16	CATHODE F

ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	60	mW
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Continuous Forward Current Per Segment Derating Linear From 25℃ Per Segment	20 0.27	mA mA/℃
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35℃ to +105℃	
Storage Temperature Range	-35℃ to +105℃	
Soldering Condition: 1/16 inch below seating plane for 3 seconds at 260℃ or temperature of unit (during assembly) not over max. temperature rating above		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V	800	2000		μcd	I_F=10mA
Peak Emission Wavelength	λp		585		nm	I_F=20mA
Spectral Line Half-Width	Δλ		35		nm	I_F=20mA
Dominant Wavelength	λd		588		nm	I_F=20mA
Forward Voltage Per Segment	V_F		2.1	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=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.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

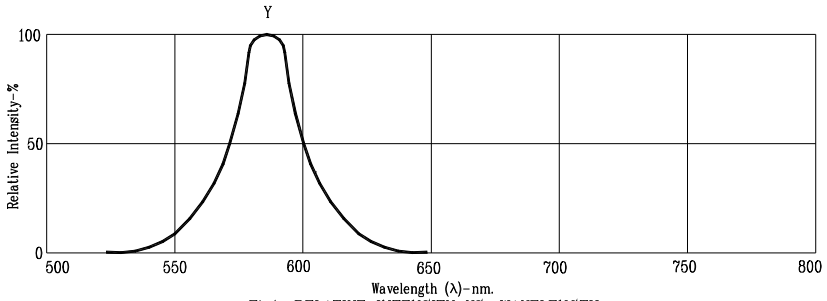


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

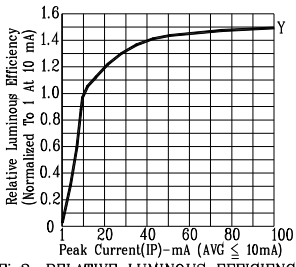


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)

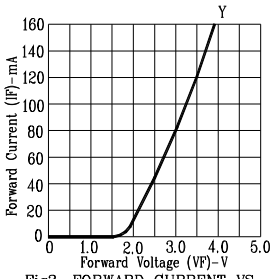


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

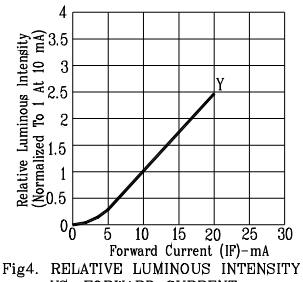


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

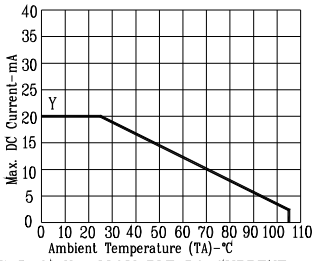


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

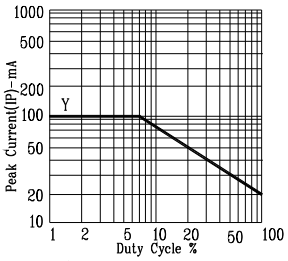


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE : Y=YELLOW