



**LED Display**  
**Product Data Sheet**  
**LTC-2723JR**

Spec No.: DS30-2001-192

Effective Date: 06/12/2001

Revision: -

**LITE-ON DCC**

**RELEASE**

## **FEATURE**

- \* 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.
- \* CATEGORIZED FOR LUMINOUS INTENSITY.

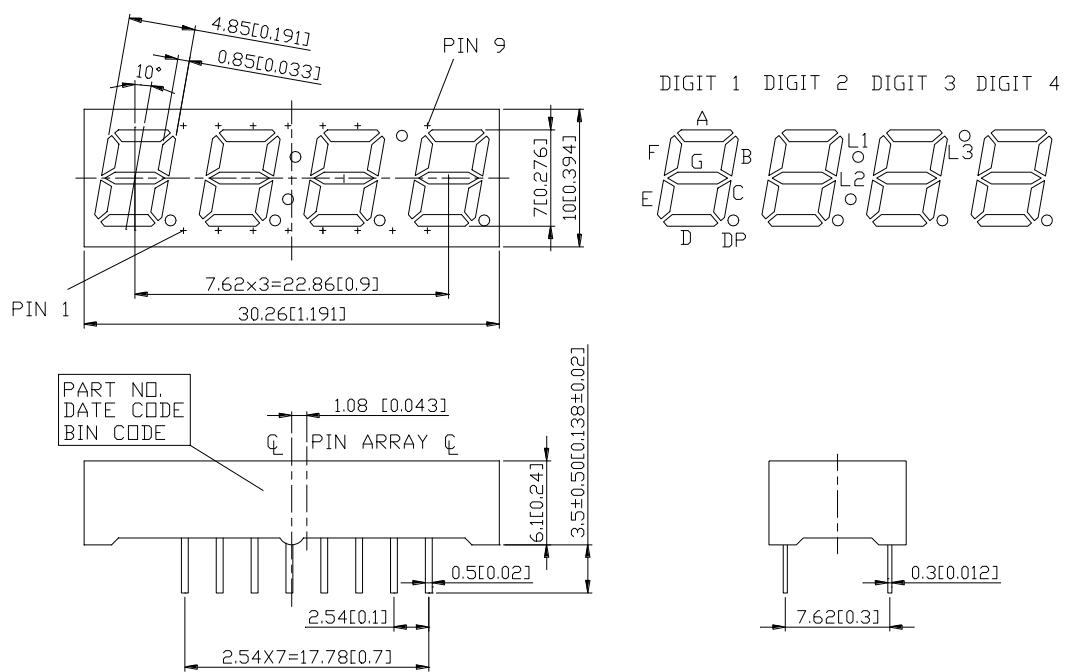
## **DESCRIPTION**

The LTC-2723JR is a 0.28 inch (7 mm) digit height quadruple digits seven-segment display. This device utilizes AlInGaP super red LED chips, which are made from AlInGaP on a non-transparent GaAs substrate, and has a gray face and white segment .

## **DEVICE**

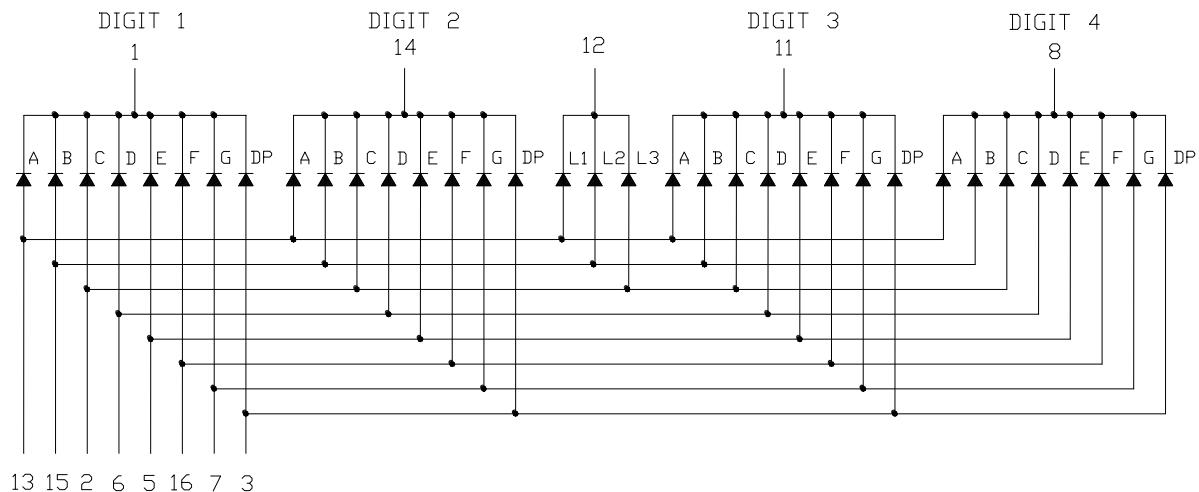
<b>PART NO.</b>	<b>DESCRIPTION</b>
AlInGaP Super Red	Multiplex Common Cathode
LTC-2723JR	Rt. Hand Decimal

## PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerances are  $\pm 0.25$ -mm (0.01") unless otherwise noted.

## INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

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

**ABSOLUTE MAXIMUM RATING AT T<sub>A</sub>=25°C**

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment ( 1/10 Duty Cycle, 0.1ms Pulse Width )	90	mA
Continuous Forward Current Per Segment	25	mA
Derating Linear From 25°C Per Segment	0.33	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +85°C	
Storage Temperature Range	-35°C to +85°C	
Solder Temperature 1/16 inch Below Seating Plane for 3 Seconds	at 260°C	

**ELECTRICAL / OPTICAL CHARACTERISTICS AT T<sub>A</sub>=25°C**

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>V</sub>	200	600		μcd	I <sub>F</sub> =1mA
Peak Emission Wavelength	λ <sub>P</sub>		639		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		20		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		631		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	V <sub>F</sub>		2	2.6	V	I <sub>F</sub> =20mA
Reverse Current Per Segment	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V
Luminous Intensity Matching Ratio	I <sub>V</sub> -m			2:1		I <sub>F</sub> =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)

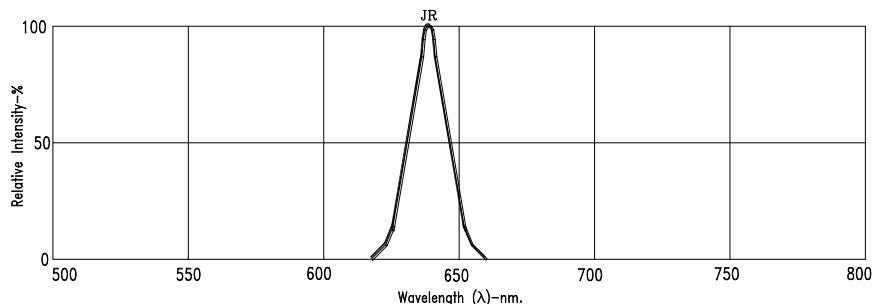


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

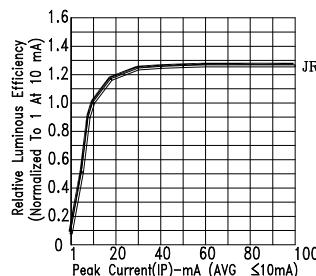
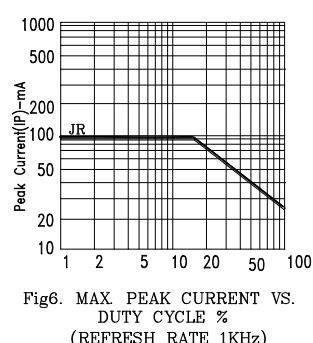
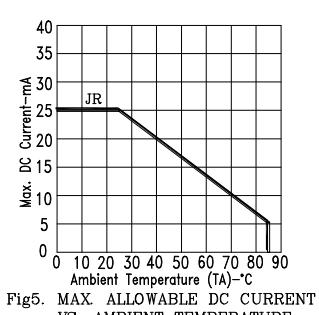
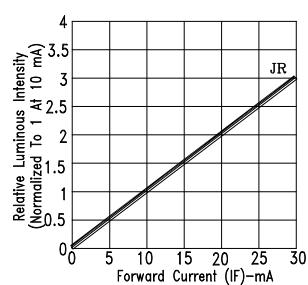
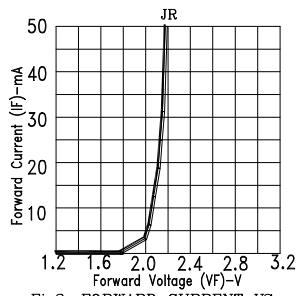


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT



NOTE : JR=AlInGaP SUPER RED