

FEATURES

- * 0.34 INCH (8.5mm) DIGIT HEIGHT.
- * CONTINUOUS UNIFORM SEGMENTS.
- * LOW POWER REQUIREMENT.
- * EXCELLENT CHARACTERS APPEARANCE.
- * HIGH BRIGHTNESS & HIGH CONTRAST.
- * WIDE VIEWING ANGLE.
- * SOLID STATE RELIABILITY.

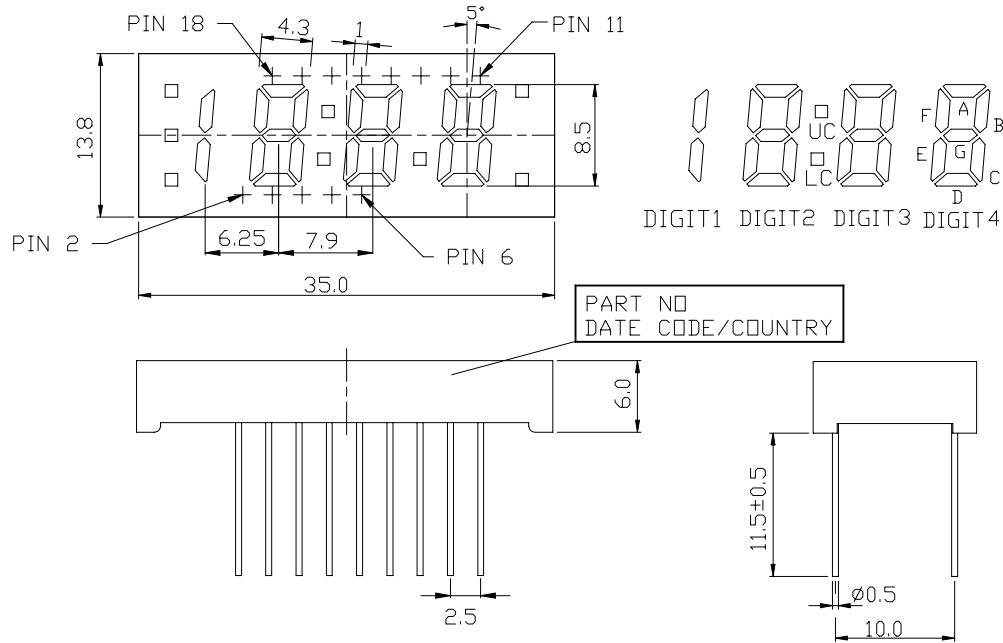
DESCRIPTION

The LTC-3645P is a 0.34 inch (8.5 mm) digit height quadruple digit seven-segment display. This device utilizes bright red LED chips, which are made from GaP on a transparent GaP substrate, and has a black face and red segments.

DEVICE

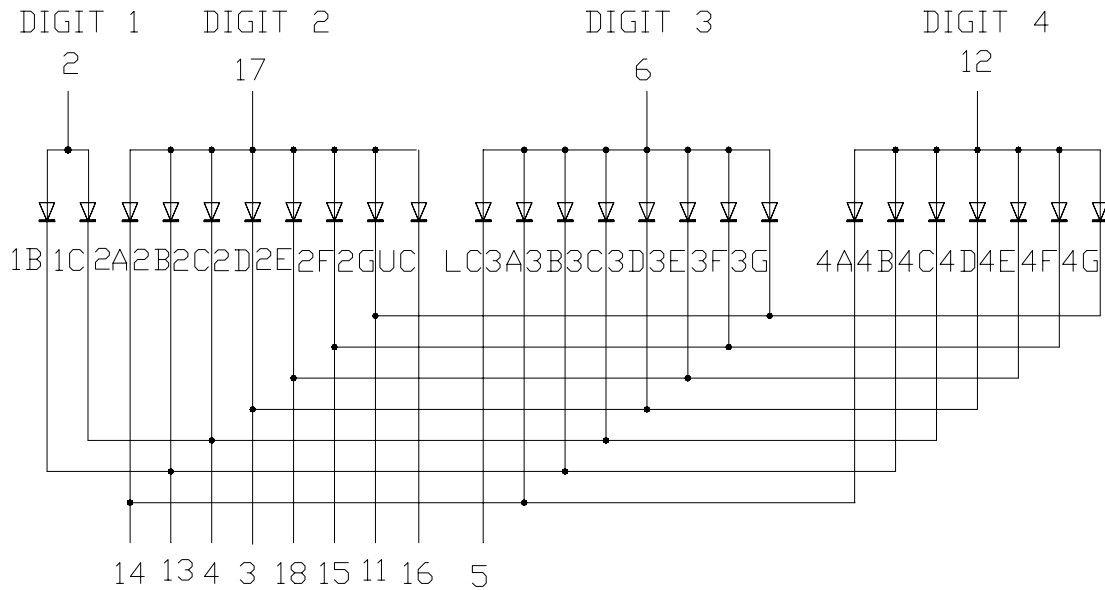
PART NO.	DESCRIPTION
Bright Red	Multiplex Common Anode
LTC-3645P	

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	NO PIN
2	COMMON ANODE DIGIT 1
3	CATHODE 2D,3D,4D
4	CATHODE 1C,2C,3C,4C
5	CATHODE LC
6	COMMON ANODE DIGIT 3
7	NO PIN
8	NO PIN
9	NO PIN
10	NO PIN
11	CATHODE 2G,3G,4G
12	COMMON ANODE DIGIT 4
13	CATHODE 1B,2B,3B,4B
14	CATHODE 2A,3A,4A
15	CATHODE 2F,3F,4F
16	CATHODE U.C.
17	COMMON ANODE DIGIT 2
18	CATHODE 2E,3E,4E

ABSOLUTE MAXIMUM RATING AT T_A=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	40	mW
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	60	mA
Continuous Forward Current Per Segment	15	mA
Derating Linear From 25°C Per Segment	0.2	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_A=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	500	1600		μcd	I _F =10mA
Peak Emission Wavelength	λ _p		697		nm	I _F =20mA
Spectral Line Half-Width	Δλ		90		nm	I _F =20mA
Dominant Wavelength	λ _d		657		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	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 CHARACTERISTICS CURVES (25°C Ambient Temperature Unless Otherwise Note)

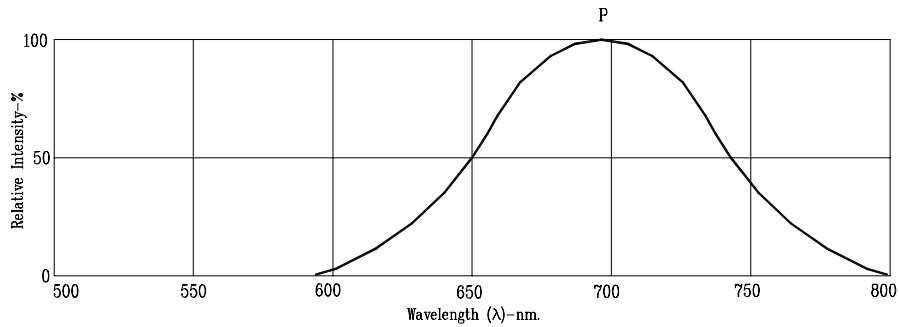


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

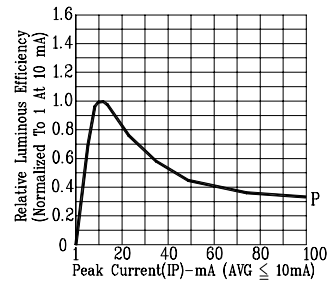


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)

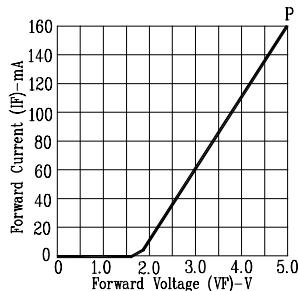


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

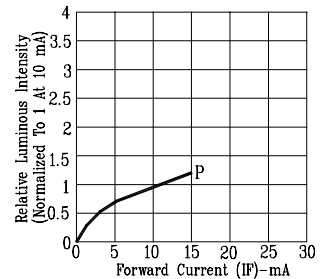


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

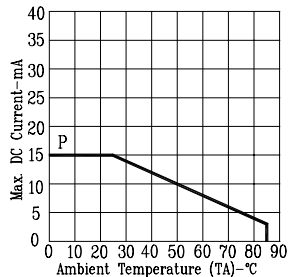


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

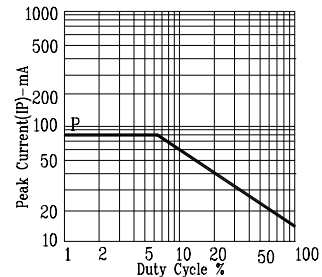


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE: P=BRIGHT RED