

FEATURE

- * 0.4 INCH (10.0 mm) DIGIT HEIGHT
- * LOW POWER REQUIREMENT
- * CONTINUOUS UNIFORM SEGMENTS.
- * EXCELLENT CHARACTERS APPEARANCE.
- * HIGH CONTRAST .
- * HIGH BRIGHTNESS.
- * SOLID STATE RELIABILITY.
- * CATEGORIZED FOR LUMINOUS INTENSITY.

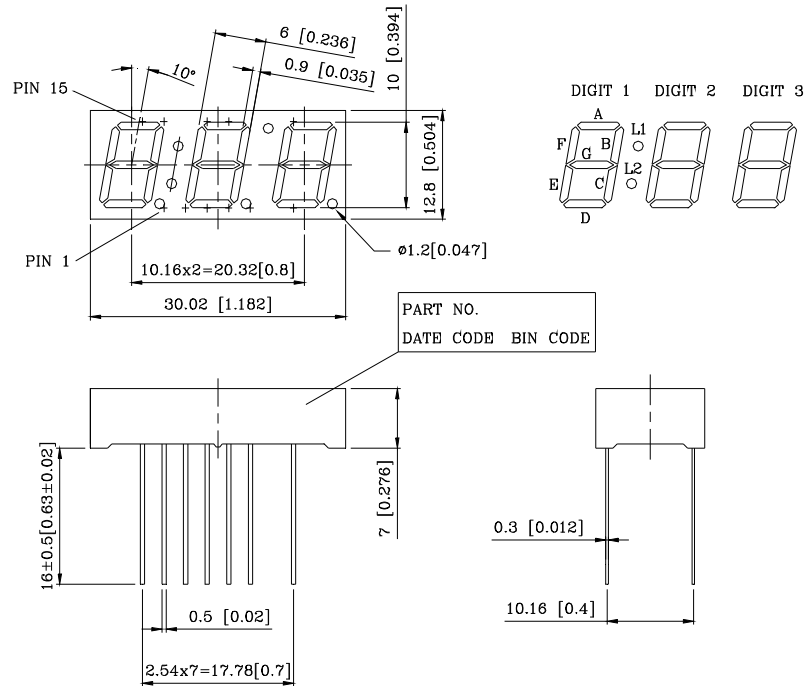
DESCRIPTION

The LTC-4762HR-01J is a 0.4 inch (10.0mm) digit height triple digit display. This device utilizes high efficiency red LED chips which are made from GaAsP on a Gap substrate, and has a black face and red segments.

DEVICE

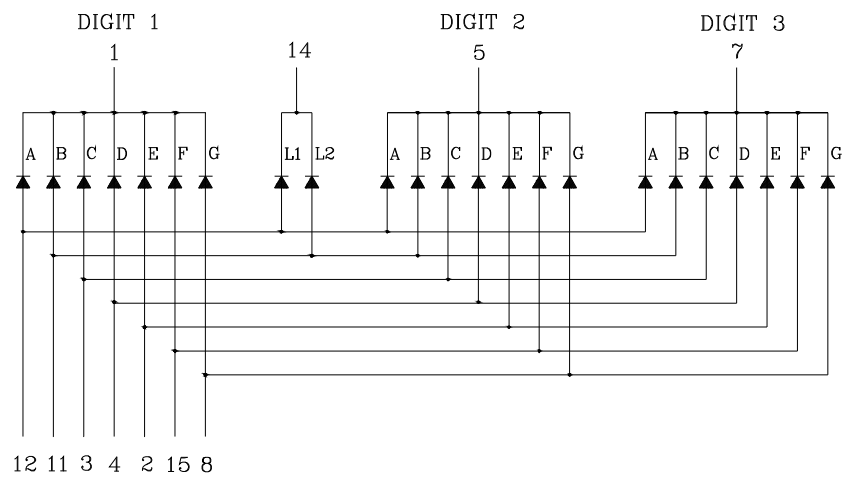
PART NO.	DESCRIPTION
HI-EFF. RED	MULTIPLEX COMMON CATHODE
LTC-4762HR-01J	

PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

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

ABSOLUTE MAXIMUM RATING AT T_A=25°C

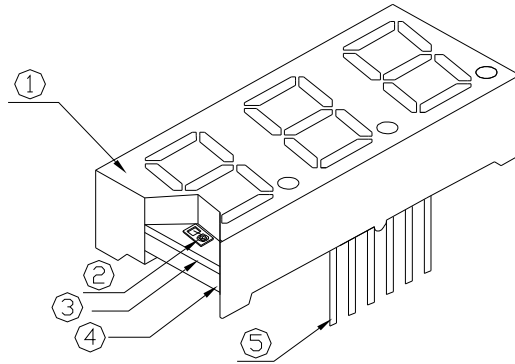
PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	75	mW
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current Per Segment	25	mA
Derating Linear From 25°C Per Segment	0.33	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C 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_A=25°C

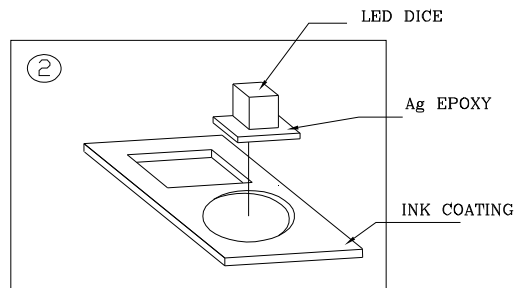
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITI- ON
Average Luminous Intensity	I _v	800	2200		μcd	I _F =10mA
Peak Emission Wavelength	λ _p		635		nm	I _F =20mA
Spectral Line Half-Width	Δ λ		40		nm	I _F =20mA
Dominant Wavelength	λ _d		621		nm	I _F =20mA
Forward Voltage. Per Segment	V _F		2.0	2.6	V	I _F =20mA
Reverse Current, Per Segment	I _R			100	μA	V _R =5V
Luminous Intensity Matching Ratio	I _v -m			2:1		I _F =10mA

Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (commission internationale DEL'clairage) eye-response curve.

CROSS SECTION & MATERIAL LIST.



1. Ag CONDUCTIVE EPOXY USING
2. ON THE PCB, COATING A LAYER OF INK FOR CONTROLLING THE Ag EPOXY SCOPE



NO.	Items	Material
1	Reflector	Polycarbonate
2	LED chip	GaAsP on GaP Red
3	PCB	Resion+Glass+Fiber
4	Epoxy	Resin
5	Kovar pin	Cu+Fe+Sn

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES (25°C Ambient Temperature Unless Otherwise Noted)

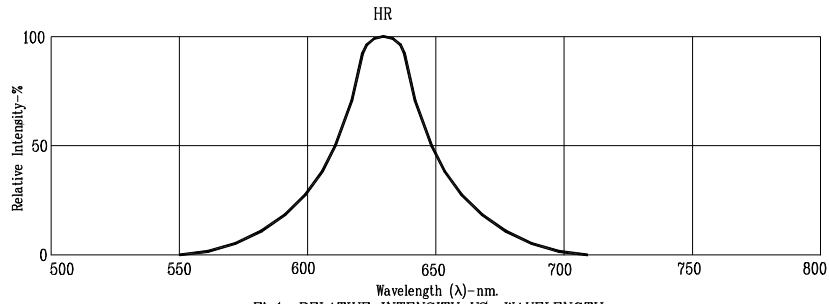


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

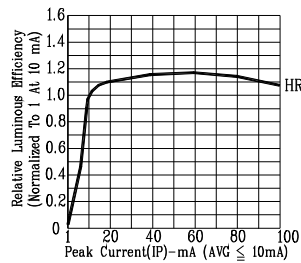


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)

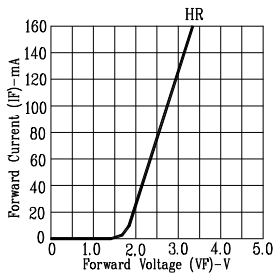


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

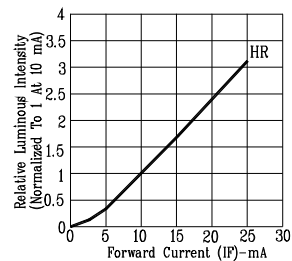


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

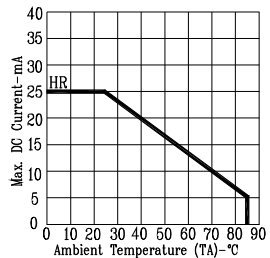


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE

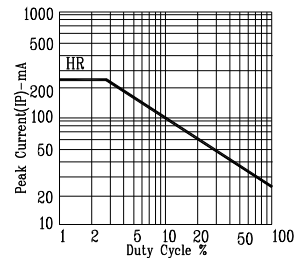


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE: HR=HL - EFF.RED