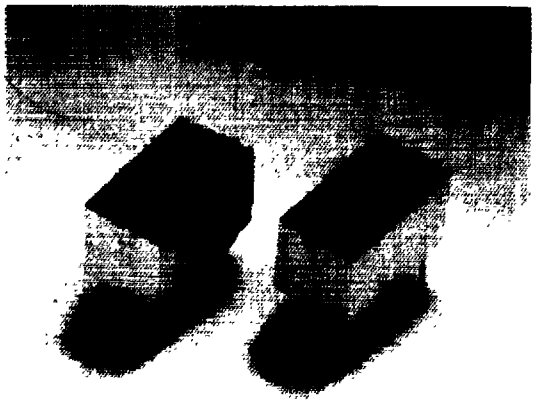
LTS-360WC SERIES

0.36" LOW CURRENT RED SINGLE DIGIT NUMERIC LED DISPLAYS

FEATURES

- 0 36 INCH (9 14mm) DIGIT HEIGHT
- CONTINUOUS UNIFORM SEGMENTS
- LOW POWER CONSUMPTION
- LOW POWER REQUIREMENT
- EXCELLENT CHARACTERS APPEARANCE
- HIGH BRIGHTNESS
- WIDE VIEWING ANGLE
- SOLID STATE RELIABILITY
- CATEGORIZED FOR LUMINOUS INTENSITY.
- I C COMPATIBLE
- EASY MOUNTING ON P.C. BOARD.



DESCRIPTION

The LTS-360WC series are 0 36 inch (9 14mm) height single digit displays

The low current red series devices utilize LED chips which are made from AlGaAs on a non-transparent GaAs substrate Low current red displays have gray face and white segment color

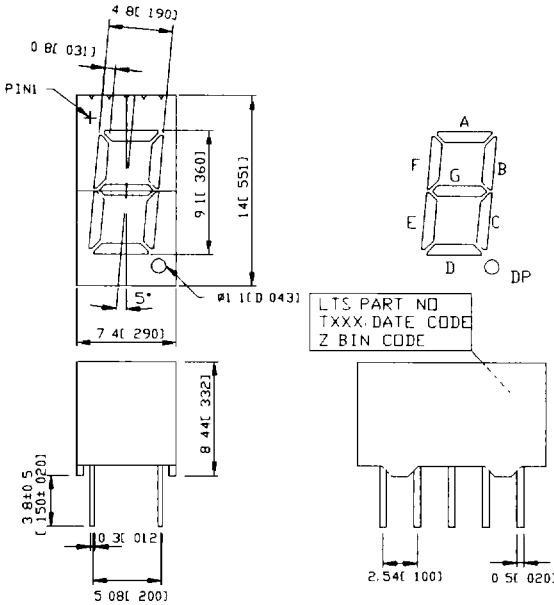
These low current seven segment displays are designed for applications requiring low power consumption. They are tested and selected for their excellent low current characteristics to ensure that the segments are matched at low current Drive current as low as 1 mA per segment is available.

DEVICES

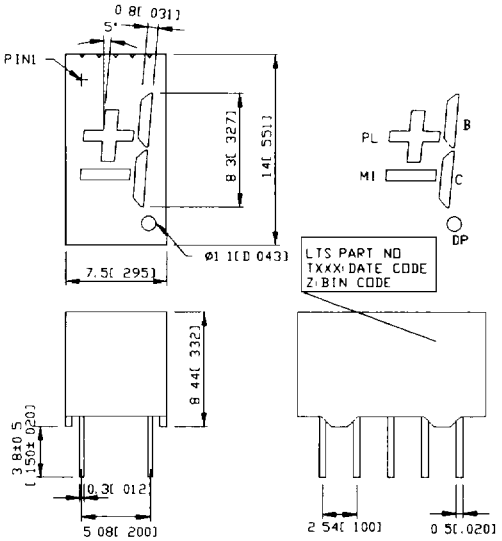
PART NO. LTS— LOW CURRENT RED	DESCRIPTION	PACKAGE DIMENSION	INTERNAL CIRCUIT DIAGRAM
360WC	Common Anode, Rt. Hand Decimal	A	A
367WC	Common Cathode, Rt. Hand Decimal	A	B
368WC	Common Cathode, ± 1 Overflow	B	C

PACKAGE DIMENSIONS

A. LTS-360 WC /367 WC



B. LTS-368 WC



NOTES : All dimensions are in millimeters (inchs.) tolerance are ±0.25mm (0.010) unless otherwise noted.

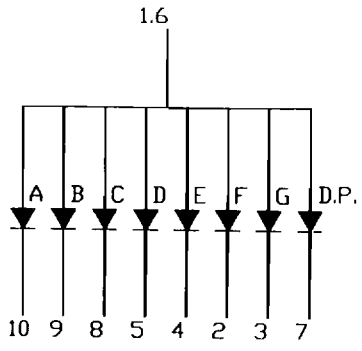
PIN CONNECTION

PIN NO.	CONNECTION		
	A. LTS-360 WC	B. LTS-367 WC	C. LTS-368 WC
1	Common Anode * 1	Common Cathode * 1	Cathode PI & Mi *2
2	Cathode F	Anode F	Anode Plus Sign
3	Cathode G	Anode G	Anode Minus Sign
4	Cathode E	Anode E	Cathode PI & Mi *2
5	Cathode D	Anode D	No Pin
6	Common Anode * 1	Common Cathode * 1	Cathode B, C & D P *3
7	Cathode D.P.	Anode D P	Anode D P
8	Cathode C	Anode C	Anode C
9	Cathode B	Anode B	Anode B
10	Cathode A	Anode A	Cathode B, C & D P *3

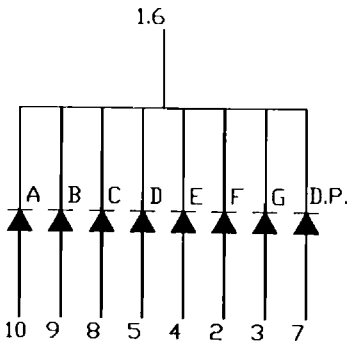
NOTES 1 Pin 1 & 6 are internally connected
2 Pin 1 & 4 are internally connected
3 Pin 6 & 10 are internally connected

INTERNAL CIRCUIT DIAGRAM

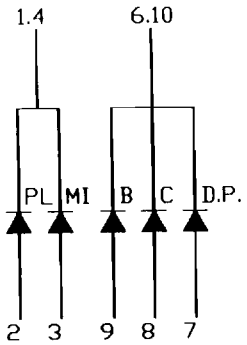
A. LTS-360 WC



B. LTS-367 WC



C. LTS-368 WC



ABSOLUTE MAXIMUM RATINGS AT $T_A = 25°C$

PARAMETER	LOW CURRENT RED	UNIT
Power Dissipation Per Segment	75	mW
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	125	mA
Continuous Forward Current Per Segment Derating Linear From 25°C Per Segment	30 0.4	mA 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
LTS-360 WC / 367 WC / 368 WC

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	200	650		μ cd	I_F =1mA
			3400		μ cd	I_F =5mA
Peak Emission Wavelength	λ p		660		nm	I_F =20mA
Spectral Line Half-Width	Δ λ		35		nm	I_F =20mA
Dominant Wavelength	λ d		638		nm	I_F =20mA
Forward Voltage, Per Segment	V_F		1.6	2.4	V	I_F =1mA
			1.7			I_F =5mA
			1.8			I_F =20mA
Reverse Current, Per Sergment	I_R			100	μ A	V_R =5V
Luminous Intensity Matching Ratio	Iv-m			2:1		I_F =10mA

TYPIGSAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES
(25 ℃ Ambient Temperature Unless Otherwise Noted)

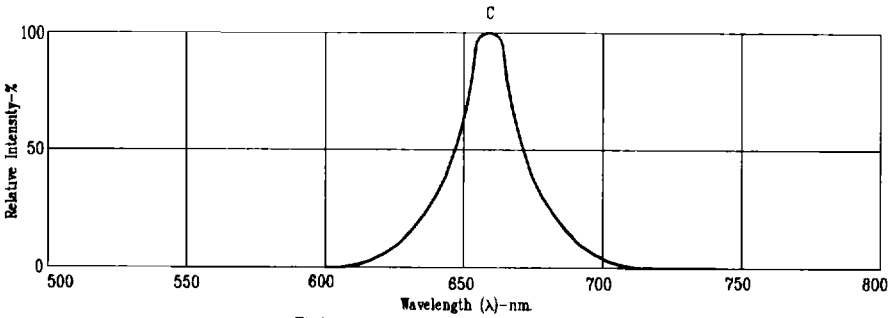


Fig1 RELATIVE INTENSITY VS WAVELENGTH

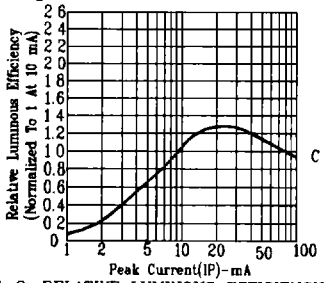


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS PEAK CURRENT

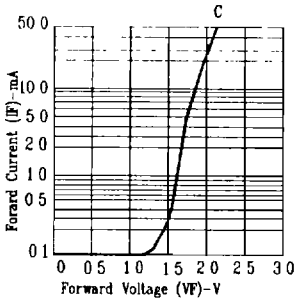


Fig3 FORWARD CURRENT VS FORWARD VOLTAGE

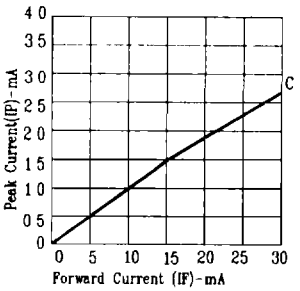


Fig4 RELATIVE LUMINOUS INTENSITY VS FORWARD CURRENT

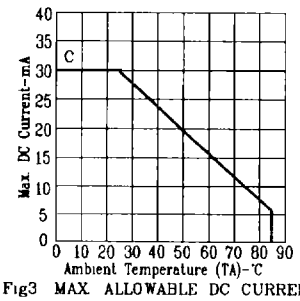


Fig3 MAX ALLOWABLE DC CURRENT VS AMBIENT TEMPERATURE

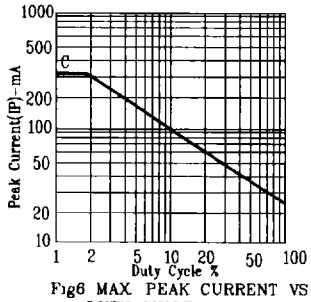


Fig6 MAX PEAK CURRENT VS DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE C=ULTRABRIGHT RED (REFRESH RATE 1KHz)