Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

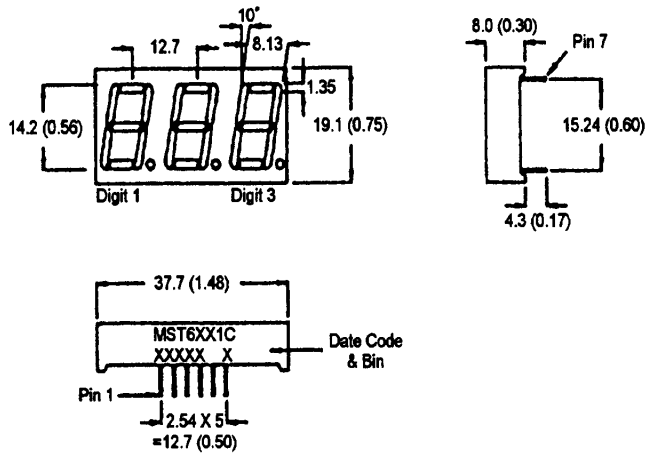
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

FAIRCHILD
SEMICONDUCTOR™

0.56 INCH (14.2 MM) THREE DIGIT STICK DISPLAY

BRIGHT RED MST6111C, MST6141C
GREEN MST6411C, MST6441C
HIGH EFF. RED MST6911C, MST6941C

PACKAGE DIMENSIONS



FEATURES

- Easy to read digit
- Common anode or cathode
- Low power consumption
- Highly visible bold segments
- High brightness with high contrast
- White segments on a grey face for MST64X1C and MST61X1C.
- Red segments and red face for MST69X1C
- Directly compatible with integrated circuits
- Rugged plastic/epoxy construction

APPLICATIONS

- Digital readout displays
- Instrument panels

NOTES: Dimensions are in mm (inch).
All pins are 0.5 (0.02) diameter
Tolerances are ± 0.25 (0.1) unless otherwise noted.

MODEL NUMBERS

Part number	Color	Description
MST6111C	Bright Red	Common Anode; right hand decimal
MST6141C	Bright Red	Common Cathode; right hand decimal
MST6411C	Green	Common Anode; right hand decimal
MST6441C	Green	Common Cathode; right hand decimal
MST6911C	High Efficiency Red	Common Anode; right hand decimal
MST6941C	High Efficiency Red	Common Cathode; right hand decimal

(For other color options, contact your local area Sales Office)

FAIRCHILD
SEMICONDUCTOR™

0.56 INCH (14.2 MM) THREE DIGIT STICK DISPLAY

ABSOLUTE MAXIMUM RATING (T_A=25°C unless otherwise specified)

	B.Red MST 6111C 6141C	Green MST 6411C 6441C	High Eff. Red MST 6911C 6941C	Unit
Part number				
Continuous forward current (I_f) Per Segment	15	30	30	mA
Peak forward current per die (I_f) (at f = 10.0 KHz, Duty factor = 1/10)	60	90	90	mA
Power dissipation (P_D)	40*	70*	70*	mW
*Derate Linearly from 25°C	0.17	0.33	0.33	mW/°C

Reverse voltage per dice.....5V
Operating and Storage temperature range.....- 25°C to +85°C
Lead soldering time (at 1/16 inch from the bottom of lamp).....5 seconds @ 230°C

ELECTRO - OPTICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

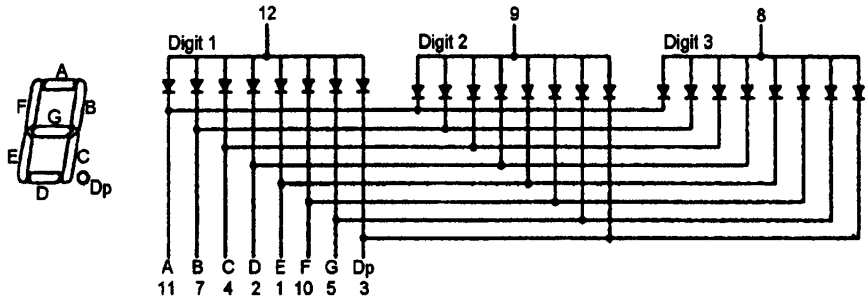
	Bright Red MST 6111C 6141C	Green MST 6411C 6441C	High Eff. Red MST 6911C 6941C	Test Condition
Part number				
Luminous intensity (ucd)				
minimum	300	800	900	I_F = 20mA
typical	700	2200	2200	I_F = 20mA
Forward voltage (V_F)				
typical	2.1	2.1	2.0	I_F = 20mA
maximum	2.6	2.8	2.8	
Peak wavelength (nm)	697	570	635	I_F = 20mA
Spectral line half width (nm)	90	30	45	I_F = 20mA
Reverse breakdown voltage (V_R)	5	5	5	I_R =100uA

FAIRCHILD
SEMICONDUCTOR™

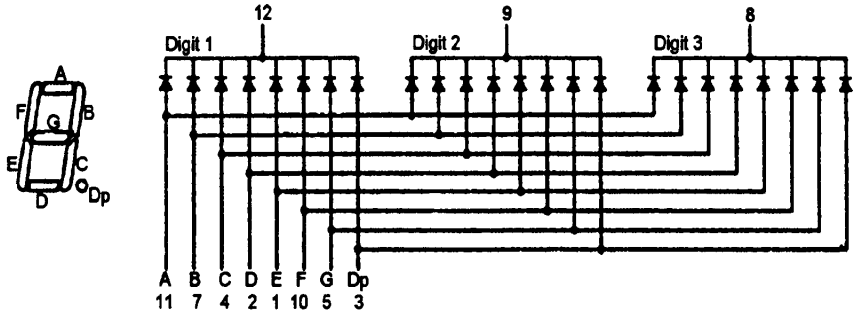
0.56 INCH (14.2 MM)
THREE DIGIT STICK DISPLAY

PINOUT

MST6X11C - Common Anode



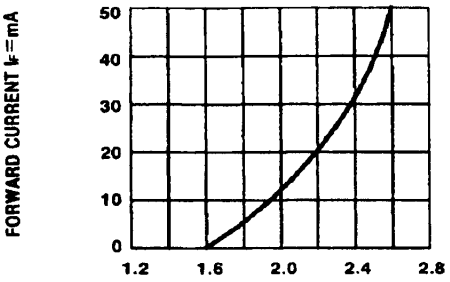
MST6X41C - Common Cathode



FAIRCHILD
SEMICONDUCTOR™

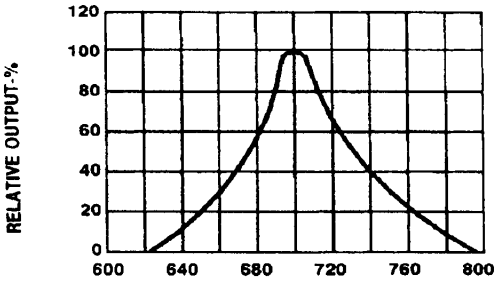
0.56 INCH (14.2 MM) THREE DIGIT STICK DISPLAY

GRAPHICAL DATA - Bright Red (T_A = 25°C unless otherwise specified)



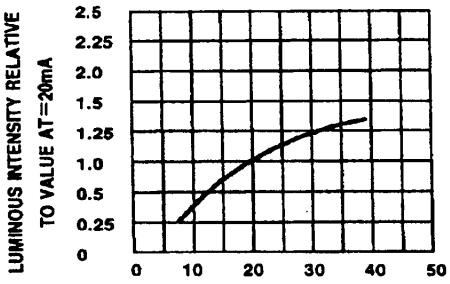
FORWARD VOLTAGE (V_F)-VOLTS

Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.



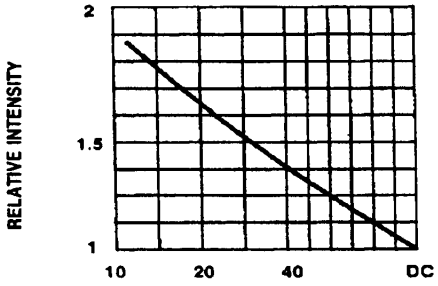
WAVELENGTH (λ)-nm

Fig.2 SPECTRAL RESPONSE



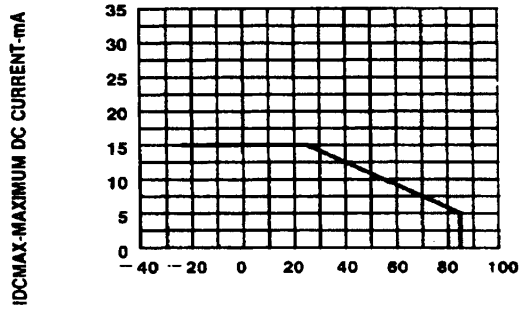
I_F-FORWARD CURRENT-mA

Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



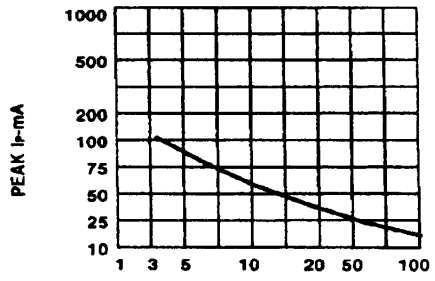
DUTY CYCLE % PER SEGMENT (AVERAGE I_F=10mA)

Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE



T_A AMBIENT TEMPERATURE °C

Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE.



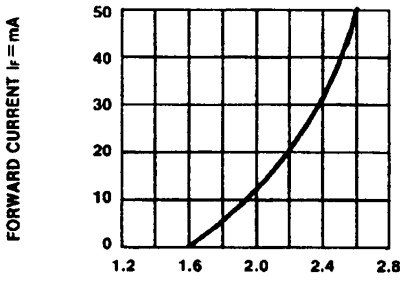
DUTY CYCLE %

Fig. 6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)

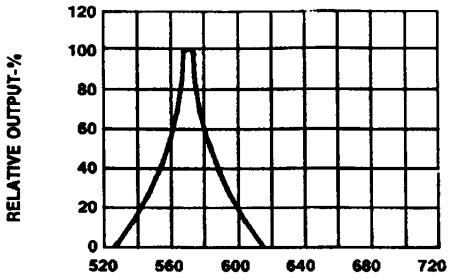
FAIRCHILD
SEMICONDUCTOR™

0.56 INCH (14.2 MM) THREE DIGIT STICK DISPLAY

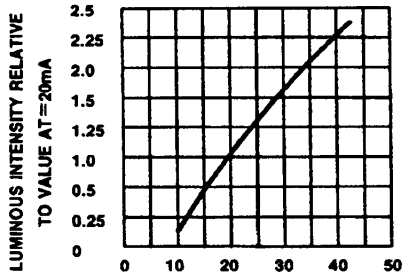
GRAPHICAL DATA - Green (T_A = 25°C unless otherwise specified)



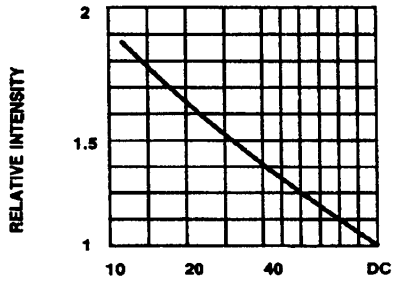
FORWARD VOLTAGE (V_F)-VOLTS
Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.



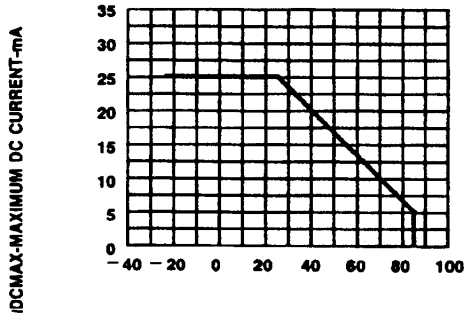
WAVELENGTH (λ)-nm
Fig.2 SPECTRAL RESPONSE



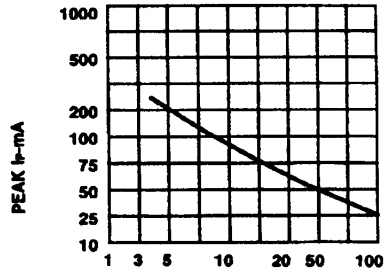
I_F-FORWARD CURRENT-mA
Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



DUTY CYCLE % PER SEGMENT (AVERAGE I_F=10mA)
Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE



T_A AMBIENT TEMPERATURE °C
Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT CS. A FUNCTION OF AMBIENT TEMPERATURE.

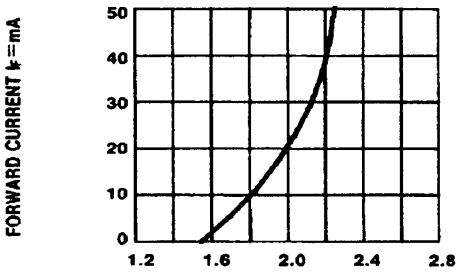


DUTY CYCLE %
Fig. 6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)

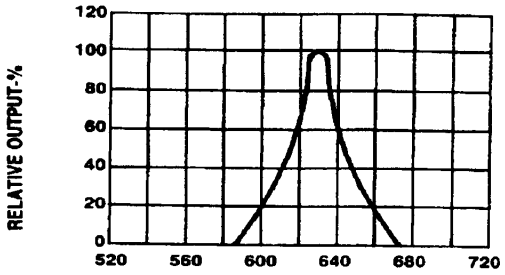
FAIRCHILD
SEMICONDUCTOR™

0.56 INCH (14.2 MM) THREE DIGIT STICK DISPLAY

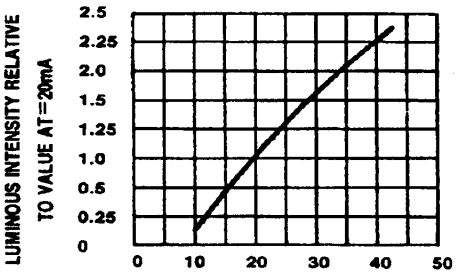
GRAPHICAL DATA - High Efficiency Red (T_A = 25°C unless otherwise specified)



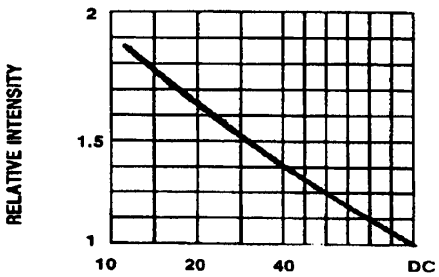
FORWARD VOLTAGE (V_F)-VOLTS
Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.



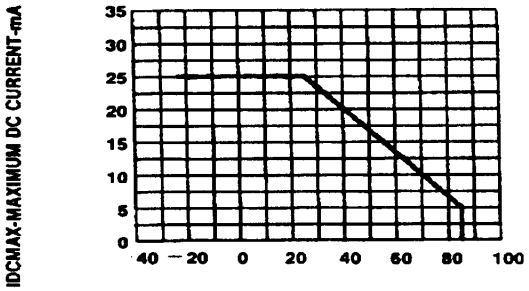
WAVELENGTH (λ)-nm
Fig.2 SPECTRAL RESPONSE



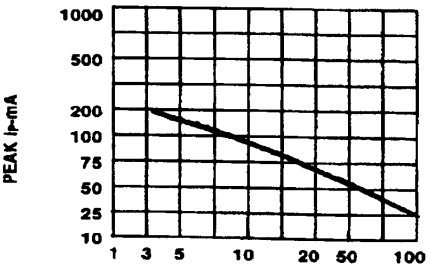
I_F-FORWARD CURRENT-mA
Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



DUTY CYCLE % PER SEGMENT
(AVERAGE I_F=10mA)
Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE



T_A AMBIENT TEMPERATURE °C
Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE.



DUTY CYCLE %
Fig. 6 MAX PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE f=1 KHz)

FAIRCHILD
SEMICONDUCTOR™

0.56 INCH (14.2 MM) THREE DIGIT STICK DISPLAY

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2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.