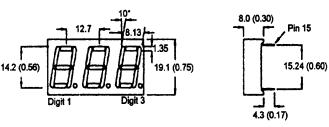
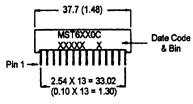
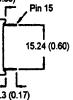


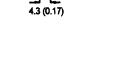
BRIGHT RED **MST6110C, MST6140C** MST6410C, MST6440C GREEN **MST6910C, MST6940C** HIGH EFF. RED

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 MST64X0C and MST61X0C. Red segments and red face for MST69X0C 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 Bright Red Common Anode: right hand decimal MST6110C MST6140C Briaht Red** Common Cathode; right hand decimal **MST6410C** Green **Common Anode; right hand decimal MST6440C** Green Common Cathode; right hand decimal **MST6910C High Efficiency Red Common Anode; right hand decimal MST6940C High Efficiency Red Common Cathode; right hand decimal** (For other color options, contact your local area Sales Office)



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

Part number	B.Red MST 6110C 6140C	Green MST 6410C 6440C	High Eff. Red MST 6910C 6940C	Unit
	01400	04400	09400	Unit
Continuous forward current (I _f)				
Per Segment	15	30	30	mA
Peak forward current per die (l _f) (at f = 10.0 KHz, Duty factor = 1/10)	60	90	90	mA
Power dissipation (P _p)	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 temperat				
Lead soldering time (at 1/16 inch fi				

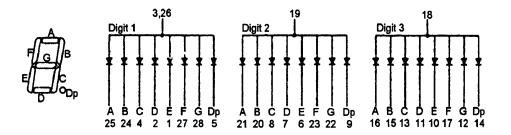
ELECTRO - OPTICAL CHARACTERISTICS ($T_A = 25^{\circ}C$ unless otherwise specified)

	Bright Red MST 6110C	Green MST 6410C	High Eff. Red MST 6910C	Test
<u>Part number</u>	6140C	6440C	6940C	Condition
Luminous intensity (ucd)				
minimum	300	800	900	i , = 20mA
typical	`700	2200	2200	l, = 20mA
Forward voltage (V,)				
typical	2.1	2.1	2.0	l, = 20mA
maximum	2.6	2.8	2.8	
Peak wavelength (nm)	697	570	635	l, = 20mA
Spectral line half width (nm)	90	30	45	l, = 20mA
Reverse breakdown voltage (V	_R) 5	5	5	I _R =100uA



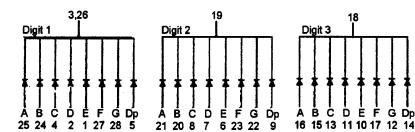
PINOUT

MST6X10C - Common Anode



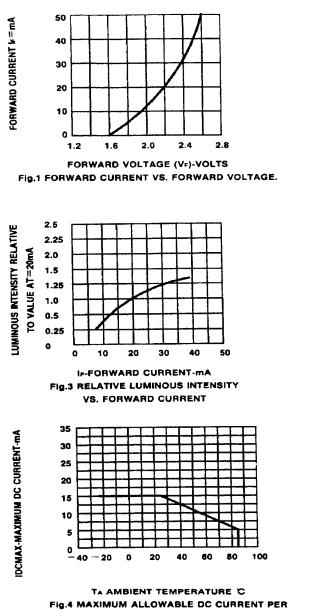
MST6X40C - Common Cathode



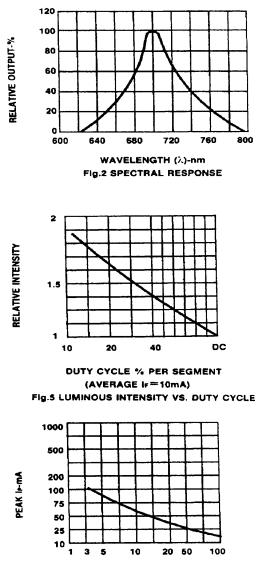




GRAPHICAL DATA - Bright Red (T_A = 25°C unless otherwise specified)



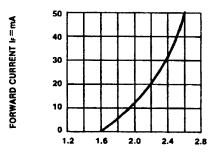




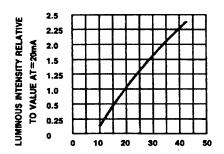
DUTY CYCLE % Fig. 6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1=1 KHz)

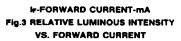


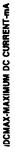
GRAPHICAL DATA - Green (T_A = 25°C unless otherwise specified)

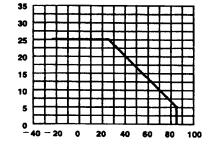




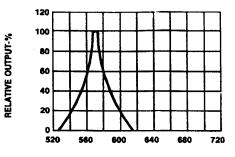




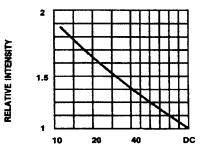




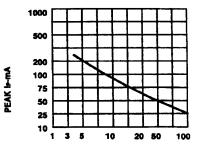
TA AMBIENT TEMPERATURE C Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT CS. A FUNCTION OF AMBIENT TEMPERATURE.



WAVELENGTH (λ)-nm Fig.2 SPECTRAL RESPONSE



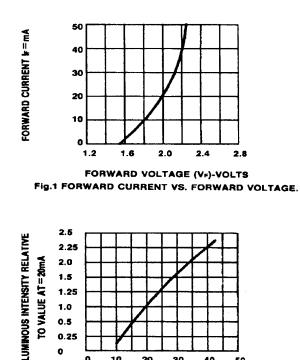
DUTY CYCLE % PER SEGMENT (AVERAGE Ir=10mA) Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE



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



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





30

40

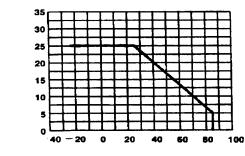
50

20

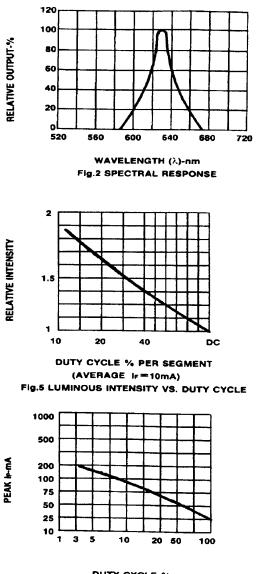
10

0

IDCMAX-MAXIMUM DC CURRENT-MA



TA 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 (=1 KHz)



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