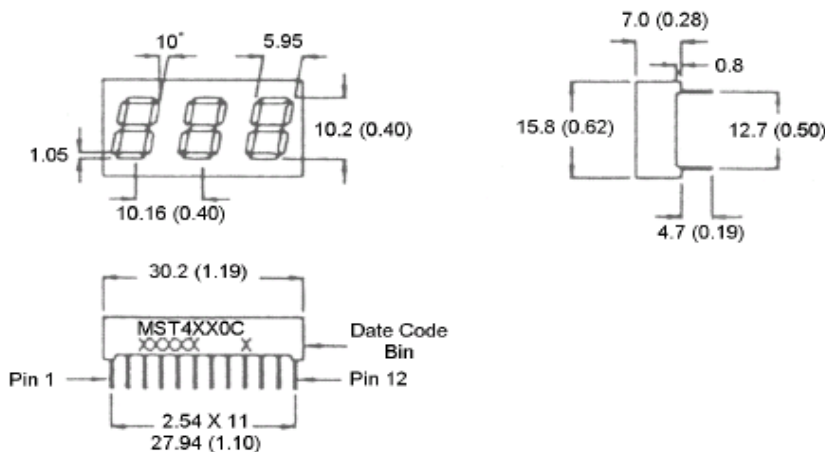


EVERLIGHT

10.2mm (0.4 inch) Three Digit NUMERIC STICK DISPLAY

AllnGaP Red (632nm) MST4H10C, MST4H40C
 AllnGaP Red (639nm) MST4R10C, MST4R40C
 AllnGaP Yellow MST4Y10C, MST4Y40C

PACKAGE DIMENSIONS



NOTES:

- Dimensions are in mm (inches)
- Tolerances are +/- 0.25 (0.010) unless otherwise stated.

FEATURES

- Bright Bold Segments
- Common Anode/Cathode
- Low Power Consumption
- Low Current Capability
- Neutral Segments
- Grey Face
- Epoxy Encapsulated PCB
- High Performance
- High Reliability

APPLICATIONS

- Appliances
- Automotive
- Instrumentation
- Process Control

MODELS AVAILABLE

Part Number	Colour	Description	Special
MST4H10C	AllnGaP 632nm	Three Digit, no DP, Common Anode	Low Current Capability
MST4H40C	AllnGaP 632nm	Three Digit, no DP, Common Cathode	Low Current Capability
MST4R10C	AllnGaP 639nm	Three Digit, no DP, Common Anode	Low Current Capability
MST4R40C	AllnGaP 639nm	Three Digit, no DP, Common Cathode	Low Current Capability
MST4Y10C	AllnGaP Yellow	Three Digit, no DP, Common Anode	Low Current Capability
MST4Y40C	AllnGaP Yellow	Three Digit, no DP, Common Cathode	Low Current Capability

(For other colour options, contact your local area Sales Manager)



10.2mm (0.4 inch) Three Digit NUMERIC STICK DISPLAY

ABSOLUTE MAXIMUM RATINGS⁽¹⁾ ($T_A = 25^\circ\text{C}$, unless otherwise specified)

Part Number	MST4H10C	MST4R10C	MST4Y10C	
Parameter	MST4H40C	MST4R40C	MST4Y40C	Units
Continuous Forward Current (each segment)	25	25	25	mA
Peak Forward Current ($F = 10\text{KHz}$, $D/F = 1/10$)	100	100	100	mA
Power Dissipation (P_D)	60	60	60	mW
*Derate Linearly from 25°C	0.36	0.36	0.36	mW
Reverse Voltage per Die				5 Volts
Operating and Storage Temperature Range				-40°C to $+85^\circ\text{C}$
Lead soldering time (1/16 inch from standoffs)				5 seconds @ 230°C

ELECTRO-OPTICAL CHARACTERISTICS⁽¹⁾ ($T_A = 25^\circ\text{C}$, unless otherwise specified)

Part Number	MST4H10C	MST4R10C	MST4Y10C		
Parameter	MST4H40C	MST4R40C	MST4Y40C	Units	Test Condition
Luminous intensity⁽²⁾ (I_V)					
Minimum (Standard Current)	4500	4500	4500	ucd	$I_F = 10\text{mA}$
Typical (Standard Current)	5500	5500	5500	ucd	$I_F = 10\text{mA}$
Minimum (Low Current)	510	510	510	ucd	$I_F = 2\text{mA}$
Typical (Low Current)	1000	1000	1000	ucd	$I_F = 2\text{mA}$
Forward Voltage (V_F)					
Typical (Standard Current)	2.05	2.05	2.05	Volts	$I_F = 20\text{mA}$
Maximum (Standard Current)	2.40	2.40	2.40	Volts	$I_F = 20\text{mA}$
Typical (Low Current)	1.80	1.80	1.80	Volts	$I_F = 2\text{mA}$
Maximum (Low Current)	2.20	2.20	2.20	Volts	$I_F = 2\text{mA}$
Peak Wavelength	632	639	591	nm	$I_F = 10\text{mA}$
Dominant Wavelength	624	631	585	nm	$I_F = 10\text{mA}$
Spectral Line 1/2 Width	20	20	20	nm	$I_F = 10\text{mA}$
Reverse B⁽³⁾.Voltage (V_R)	5	5	5	Volts	$I_R = 100\mu\text{A}$

NOTES:

(1) Data per individual LED element

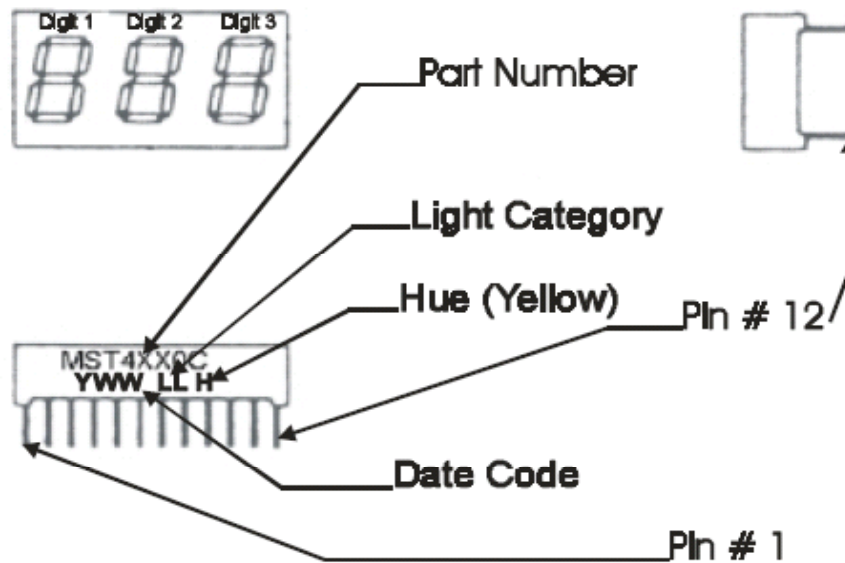
(2) Luminous intensity (ucd) = average light output per segment

(3) B = breakdown

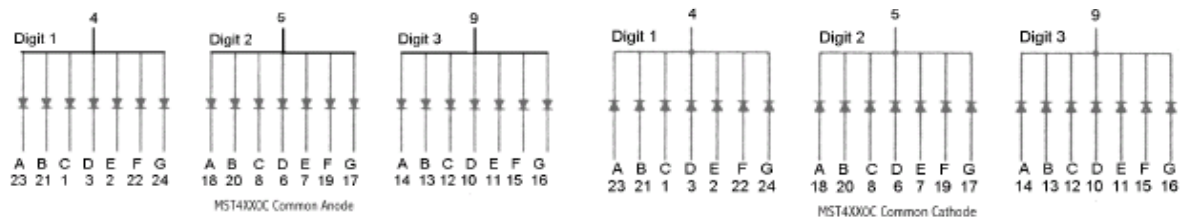
EVERLIGHT

10.2mm (0.4 inch) Three Digit NUMERIC STICK DISPLAY

PIN ORIENTATION, SEGMENT IDENTIFICATION, AND PRODUCT MARKING



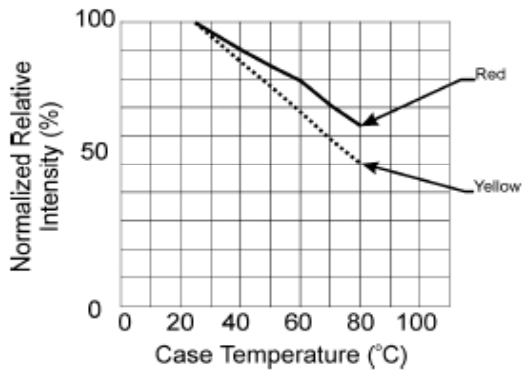
SCHEMATICS



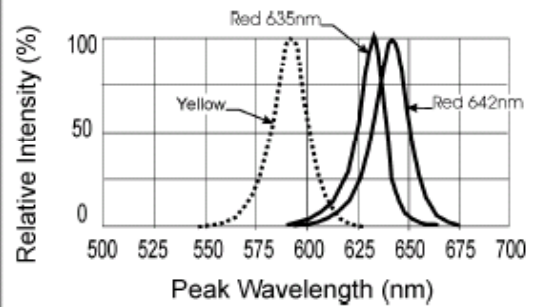
EVERLIGHT

10.2mm (0.4 inch) Three Digit NUMERIC STICK DISPLAY

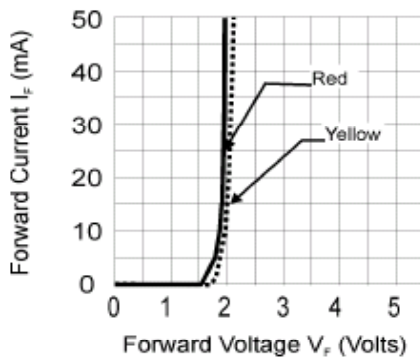
GRAPHICAL DATA AllnGaP ($T_A = 25^\circ\text{C}$, unless otherwise specified)



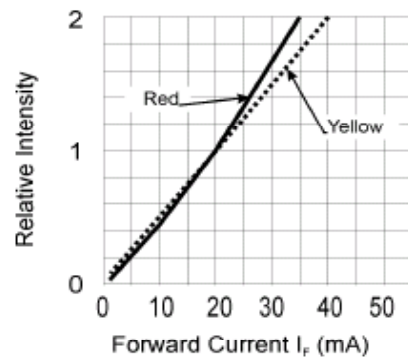
Relative Intensity vs Case Temp.



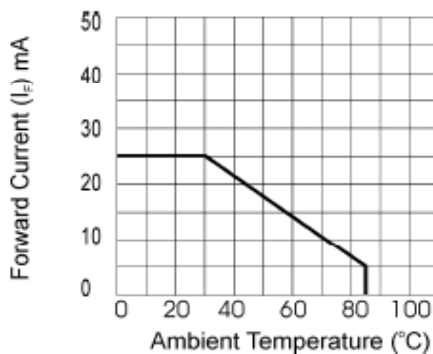
Spectral Response



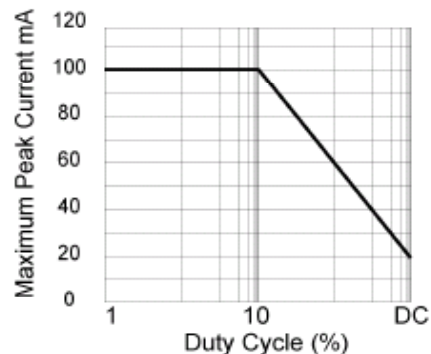
Forward Current vs Forward Voltage



Luminous Intensity vs Forward Current



Maximum Forward Current vs Ambient Temperature



Maximum Peak Current vs Duty Cycle