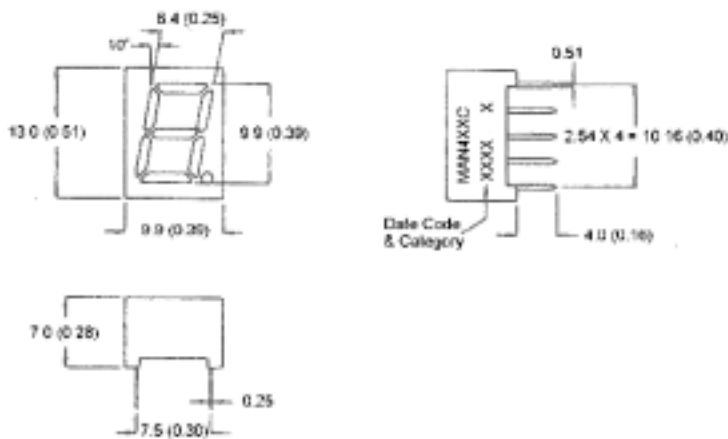


10mm (0.40 inch) One Digit NUMERIC STICK DISPLAY

AllnGaP Red (632nm) MAN4H2C, MAN4H3C
AllnGaP Red (639nm) MAN4R2C, MAN4R3C
AllnGaP Yellow MAN4Y2C, MAN5Y3C

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
MAN4H2C	AllnGaP 632nm	Single Digit, RHDP, Common Anode	Low Current Capability
MAN4H3C	AllnGaP 632nm	Single Digit, RHDP, Common Cathode	Low Current Capability
MAN4R2C	AllnGaP 639nm	Single Digit, RHDP, Common Anode	Low Current Capability
MAN4R3C	AllnGaP 639nm	Single Digit, RHDP, Common Cathode	Low Current Capability
MAN4Y2C	AllnGaP Yellow	Single Digit, RHDP, Common Anode	Low Current Capability
MAN4Y3C	AllnGaP Yellow	Single Digit, RHDP, Common Cathode	Low Current Capability

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



10mm (0.40 inch) One Digit NUMERIC STICK DISPLAY

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

Part Number	MAN4H2C	MAN4R2C	MAN4Y2C	
Parameter	MAN4H3C	MAN4R3C	MAN4Y3C	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			

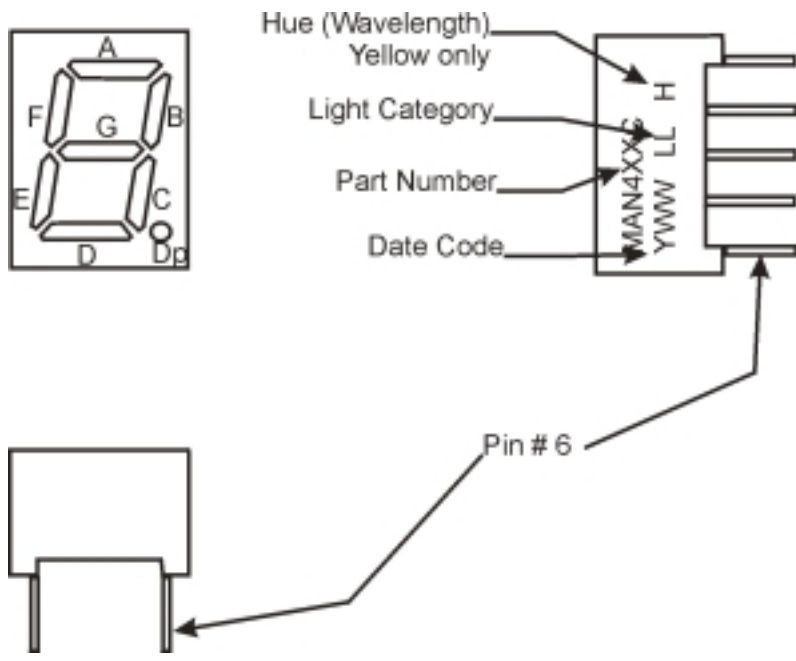
ELECTRO-OPTICAL CHARACTERISTICS⁽¹⁾ ($T_A = 25^\circ\text{C}$, unless otherwise specified)

Part Number	MAN4H2C	MAN4R2C	MAN4Y2C		
Parameter	MAN4H3C	MAN4R3C	MAN4Y3C	Units	Test Condition
Luminous intensity⁽²⁾ (I_V)					
Minimum (Standard Current)	6000	4000	8000	ucd	$I_F = 10\text{mA}$
Typical (Standard Current)	7800	5800	12800	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	$I_R = 100\mu\text{A}$

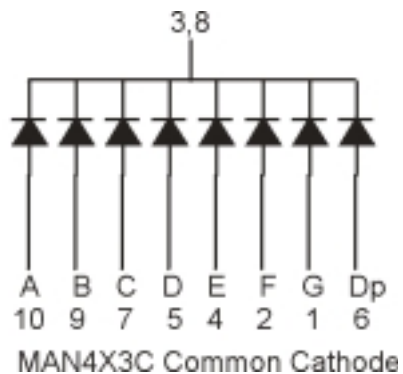
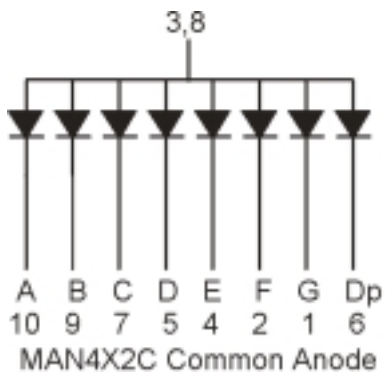
NOTES:

- (1) Data per individual LED element
- (2) Luminous intensity (ucd) = average light output per segment
- (3) B = breakdown

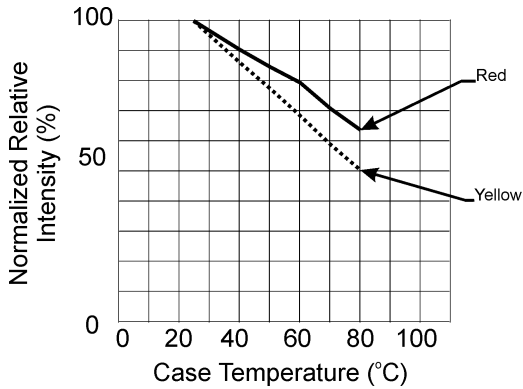
PIN ORIENTATION, SEGMENT IDENTIFICATION, AND PRODUCT MARKING



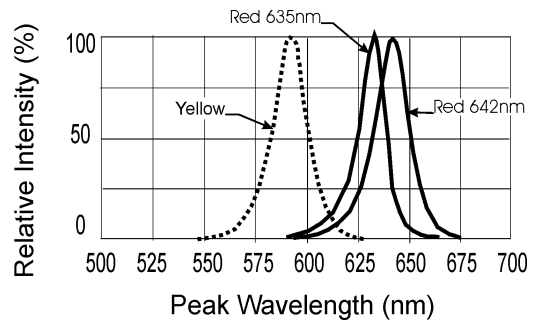
SCHEMATICS



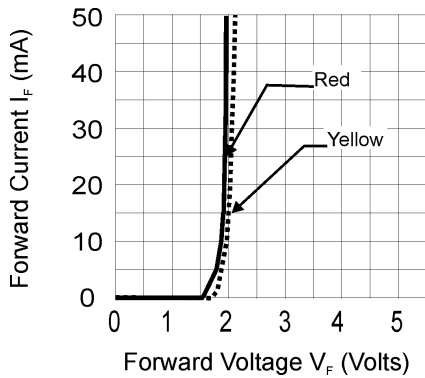
GRAPHICAL DATA AllnGaP ($T_A = 25^\circ\text{C}$, unless otherwise specified)



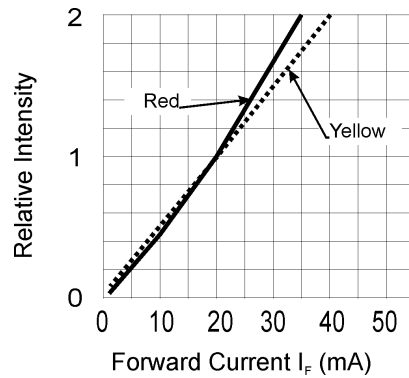
Relative Intensity vs Case Temp.



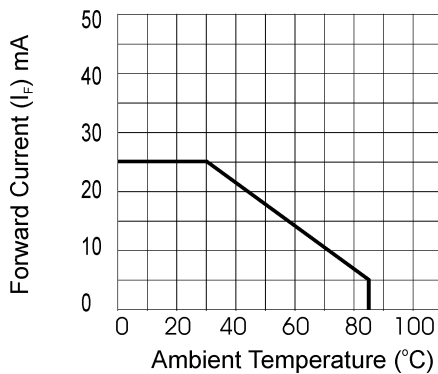
Spectral Response



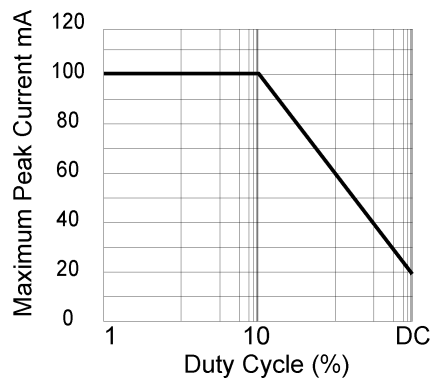
Forward Current vs Forward Voltage



Luminous Intensity vs Forward Current



Maximum Forward Current vs Ambient Temperature



Maximum Peak Current vs Duty Cycle