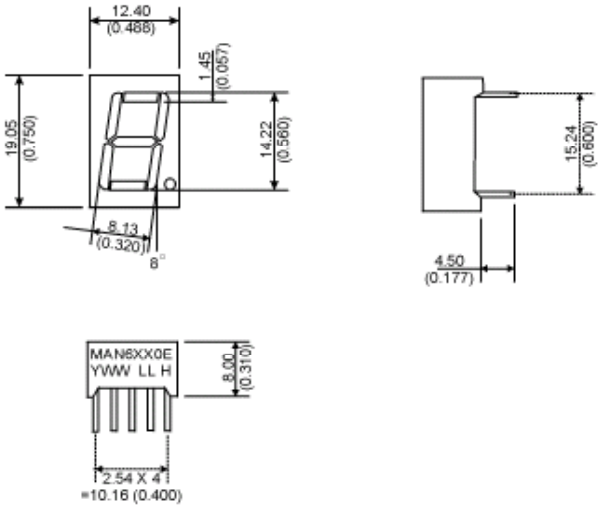
0.56 Inch (14.2mm) 1 Digit NUMERIC STICK DISPLAY

AlGaAs Red (660nm) MAN6260E.B, MAN6280E.B

Issue 002/05192000

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
- Black Face
- Epoxy Encapsulated PCB
- High Performance
- High Reliability

APPLICATIONS

- Appliances
- Automotive
- Instrumentation
- Process Control

MODELS AVAILABLE

Part Number	Colour	Description	Special
MAN6260E.B	AlGaAs	660nm Single Digit, RHDP, Common Anode	Low Current Capability
MAN6280E.B	AlGaAs	660nm Single Digit, RHDP, Common Cathode	Low Current Capability

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

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ABSOLUTE MAXIMUM RATINGS[1] (T_A = 25°C, unless otherwise specified)		
Part Number Parameter	MAN6260E.B MAN6280E .B	Units
Continuous Forward Current (each segment)	30	mA
Peak Forward Current (F = 10KHz, D/F = 1/10)	200	mA
Power Dissipation (P_D)	75	mW
***Derate Linearly from 25°C**	0.42	mW
Reverse Voltage per Die		5 Volts
Operating and Storage Temperature Range		-40°C to +85°C
Lead soldering time (1/16 inch from standoffs)		5 seconds @ 230°C

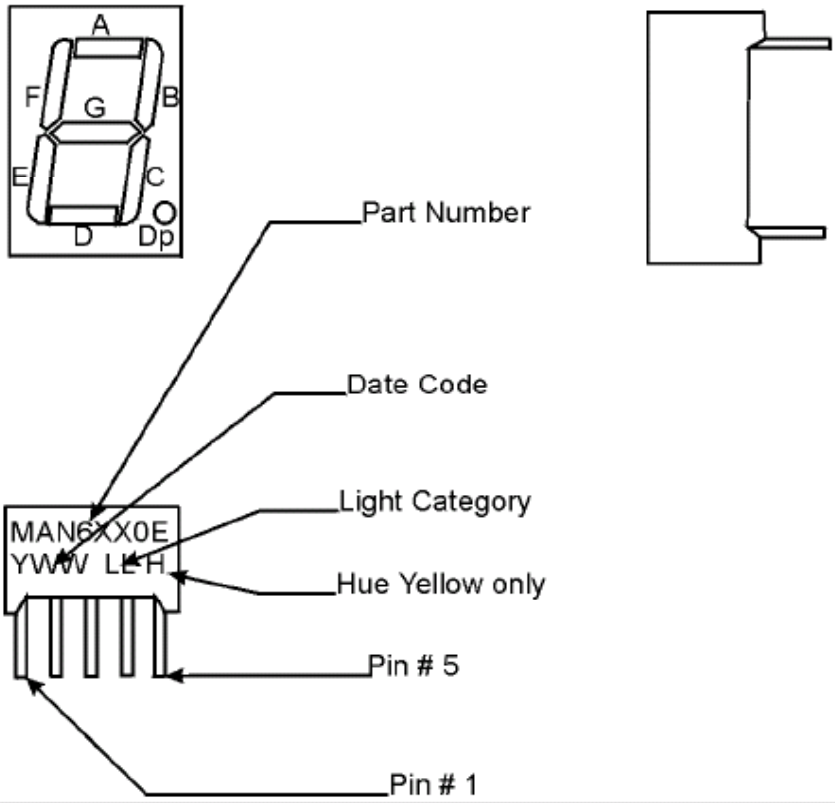
ELECTRO-OPTICAL CHARACTERISTICS[1] (T_A = 25°C, unless otherwise specified)			
Part Number Parameter	MAN6260E.B MAN6280E.B	Units	Test Condition
Luminous intensity[2] (I_V) Minimum (Standard Current)	5300	ucd	I_F = 20mA
Typical (Standard Current)	12000	ucd	I_F = 20mA
Minimum (Low Current)	300	ucd	I_F = 2mA
Typical (Low Current)	500	ucd	I_F = 2mA
Forward Voltage (V_F) Typical (Standard Current)	2.00	Volts	I_F = 20mA
Maximum (Standard Current)	2.40	Volts	I_F = 20mA
Typical (Low Current)	1.80	Volts	I_F = 2mA
Maximum (Low Current)	2.20	Volts	I_F = 2mA
Peak Wavelength	660	nm	I_F = 10mA
Dominant Wavelength	637	nm	I_F = 10mA
Spectral Line 1/2 Width	20	nm	I_F = 10mA
Reverse B[3].Voltage (V_R)	5	Volts	I_R = 100uA

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

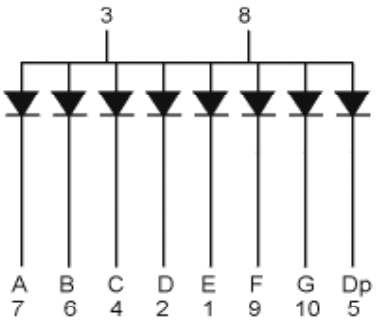
0.56 Inch (14.2mm) 1 Digit

NUMERIC STICK DISPLAY

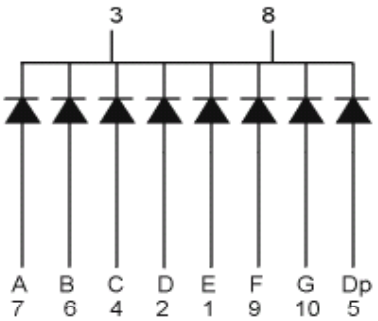
PIN ORIENTATION, SEGMENT IDENTIFICATION, AND PRODUCT MARKING



SCHEMATICS



MAN6X60
Common Anode



MAN6X80
Common Cathode

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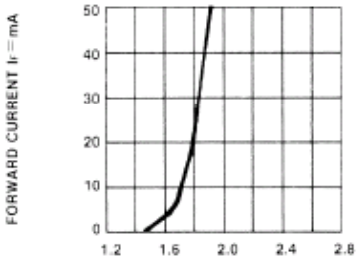
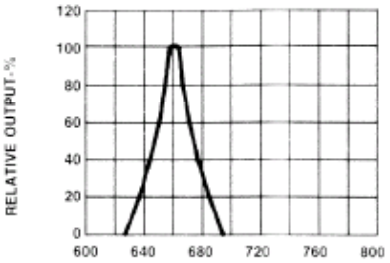
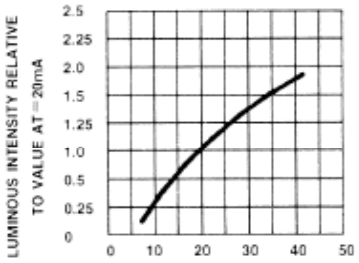
GRAPHICAL DATA AlGaAs 660nm (T_A = 25°C, unless otherwise specified)



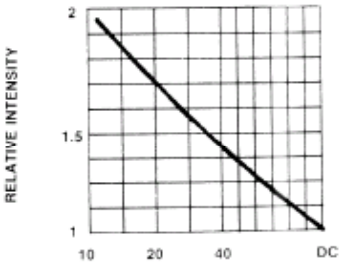
FORWARD VOLTAGE (V_F)-VOLTS
Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.



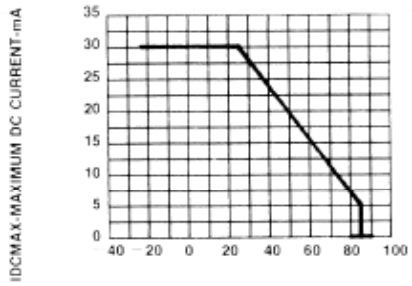
WAVELENGTH (λ)-nm
Fig.2 SPECTRAL RESPONSE



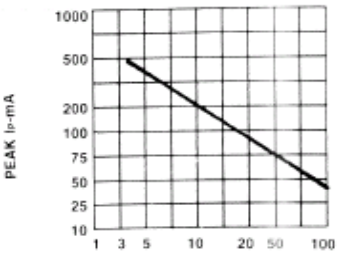
I_F-FORWARD CURRENT-mA
Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



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)