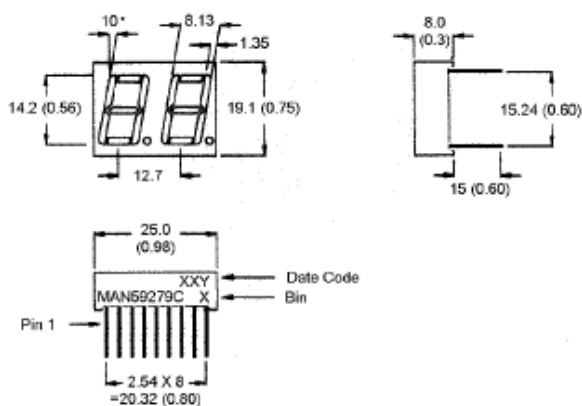


0.56 INCH (14.2mm)  
TWO DIGIT DISPLAY

PRELIMINARY DATA SHEET

HIGH EFF GREEN MAN59279C  
HIGH EFF GREEN MAN59209-3C

### PACKAGE DIMENSIONS



### FEATURES

- Easy to read digits.
- 2 digit common cathode and common anode.
- Low power consumption.
- Bold segments that are highly visible.
- High brightness with high contrast
- The device has a gray face
- 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  $\pm 0.25$  (0.01) unless otherwise noted.

### MODEL NUMBERS

Part number	Color	Face Colour	Description
MAN59279C	High Eff. Green	Gray	2 Digit, Common Cathode, RHDP
MAN59209-1C	High Eff. Green	White	2 Digit Common Anode, No Dp
MAN59209-2C	High Eff. Green	Black	2 Digit Common Anode, No Dp
MAN59209-3C	High Eff. Green	Gray	2 Digit, Common Anode, No Dp.

(For other color options, contact Sunnyvale Marketing)



**0.56 INCH (14.2mm)  
TWO DIGIT DISPLAY**

**ABSOLUTE MAXIMUM RATING** ( $T_A=25^{\circ}\text{C}$  unless otherwise specified)

Part number	High Eff. Green		Unit
	MAN 59279C	59209-3C	
Continuous forward current ( $I_f$ ) Per Segment.....	30		mA
Peak forward current per die ( $I_{f1}$ )..... (at $f = 10.0$ KHz, Duty factor = 1/10)	90		mA
Power dissipation ( $P_D$ ).....	70*		mW
*Derate Linearly from $25^{\circ}\text{C}$ .....	0.33		mW/ $^{\circ}\text{C}$
Reverse voltage per dice.....			5V
Operating and Storage temperature range.....			- $25^{\circ}\text{C}$ to $+85^{\circ}\text{C}$
Lead soldering time (at 1/16 inch from the bottom of lamp).....			3 seconds @ $260^{\circ}\text{C}$

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

Part number	High Eff. Green		Test Condition
	MAN59279C	MAN59209-3C	
Luminous intensity (ucd) minimum	800	$I_f = 20$ mA	
typical	2200	$I_f = 20$ mA	
Forward voltage ( $V_f$ ) typical	2.1	$I_f = 20$ mA	
maximum	2.8	$I_f = 20$ mA	
Peak wavelength (nm)	570	$I_f = 20$ mA	
Spectral line half width (nm)	30	$I_f = 20$ mA	
Reverse breakdown voltage ( $V_R$ )	5	$I_R = 100$ uA	



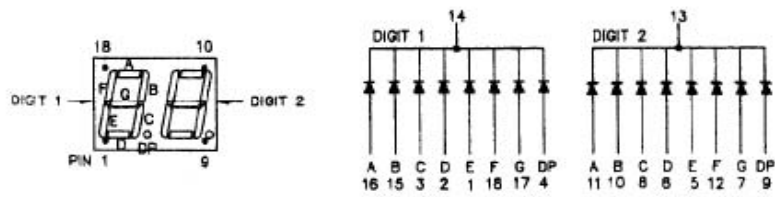
0.56 INCH (14.2mm)  
TWO DIGIT DISPLAY

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**PINOUT**

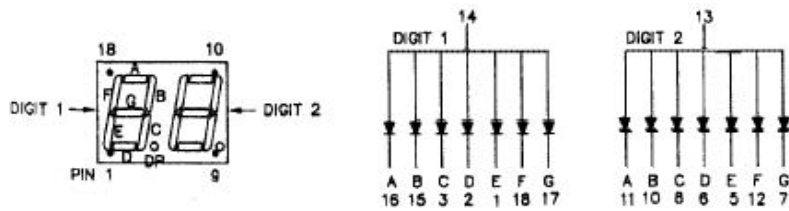
**MAN59279C - Common Cathode**



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**MAN59209-3C - Common Anode**





# 0.56 INCH (14.2m) TWO DIGIT DISPLA

## GRAPHICAL DETAILS: High Efficiency Green ( $T_A = 25^\circ\text{C}$ unless otherwise specific)

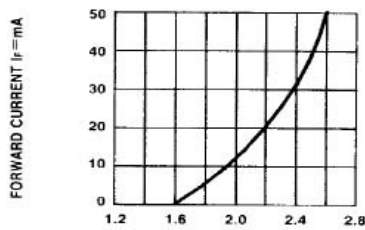


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

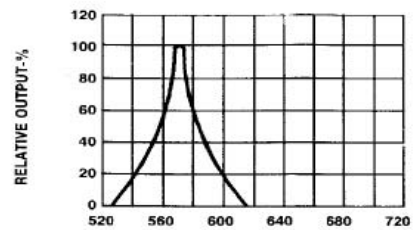


Fig.2 SPECTRAL RESPONSE

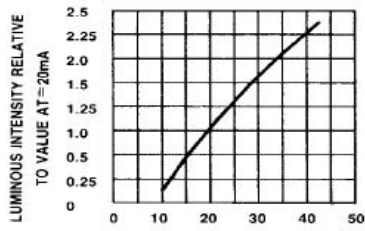


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

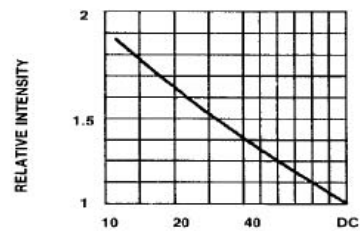


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

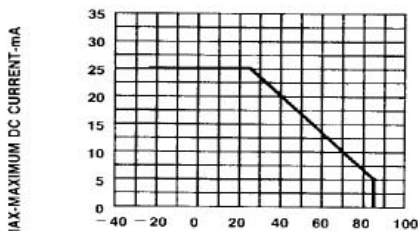


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT CS. A FUNCTION OF AMBIENT TEMPERATURE.

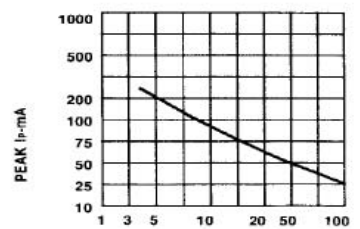


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f = 1 KHz)