Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

Fairchild Semiconductor
MV59164

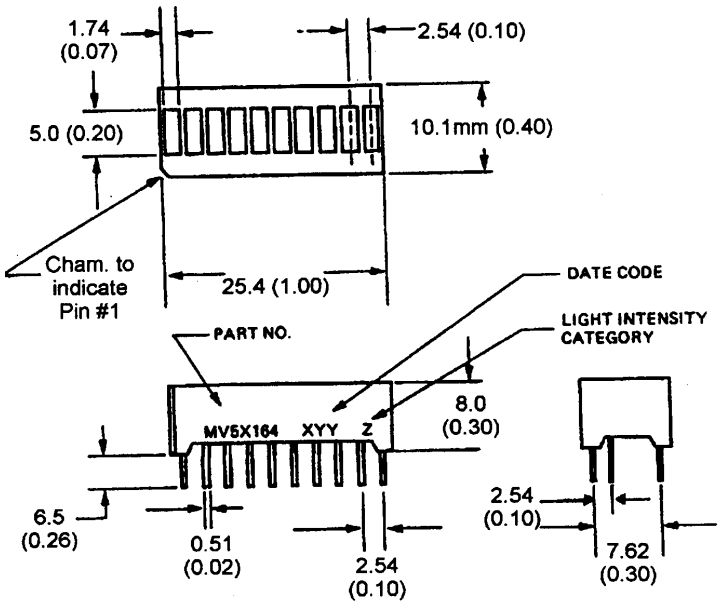
For any questions, you can email us directly:
sales@integrated-circuit.com

FAIRCHILD
SEMICONDUCTOR™

BI-COLOR BARGRAPH (STICK DISPLAY)

HER Red / Green MV59164 (BI-COLOR)

PACKAGE DIMENSIONS



FEATURES

- Large segments, closely spaced
- End stackable
- Fast switching - excellent for multiplexing
- Low power consumption
- DirectIt compatible with Ics
- Wide viewing angle
- 0.1 inch pin to pin spacing
- Individual LED chip addressable
- Dual function

APPLICATIONs

- Analog instrument displays
- Level

NOTE: Dimensions are in mm (inch).
Tolerances are ± 0.25 (0.1) unless otherwise noted.
All pins are 0.5 (.02).

MODEL NUMBER

Part Number	Colour	Description
MV59164	HER Red/Green	Individual LED addressable

(For other color options, contact your local area Sales Office)

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

	HER	Green	Units
Peak forward current per segment (Duty cycle 1/10, 10KHz)	90	90	mA
Continous IF per segment	25	25	mA
Power dissipation per segment	70*	70	mW
*Derate linearly from 25°C	0.33	0.33	mW/°C
Reverse voltage VR per segment	5	5	Volts

Operating and storage temperature range.....-25°C to +85°C
Soldering time at 260°C.....3 sec
(1/16" below seating plane)

ELECTRO - OPTICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

	HER	Green	Test Condition
Luminous Intensity/Dot Digit average (Typical)	3000ucd	3000ucd	I_F = 20mA
Forward voltage (V_F)			
typical	2.0V	2.1V	I_F = 20 mA
maximum	2.8V	2.8V	I_F = 20 mA
Peak wavelength (nm)	635nm	570nm	I_F = 20 mA
Spectral line half width (nm)	45nm	30nm	I_F = 20mA
Reverse breakdown voltage V_R	5V	5V	I_R = 100uA

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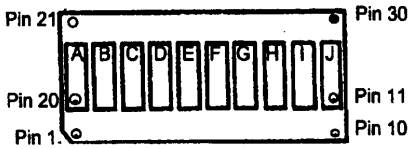
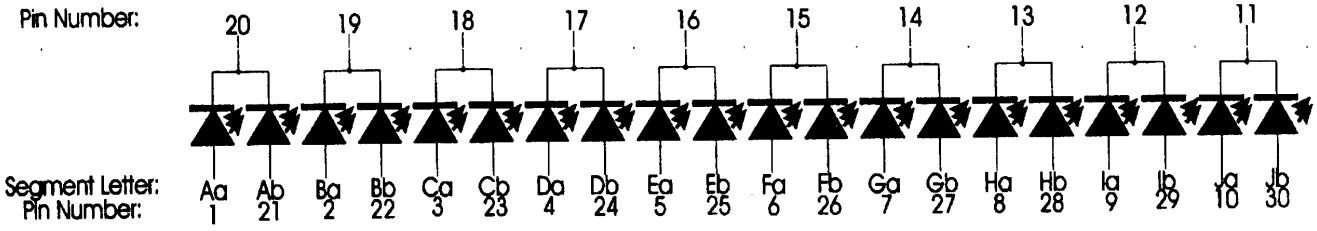
PIN CONNECTION / SCHEMATIC:





Note: **a = Red LED**
b = Green LED

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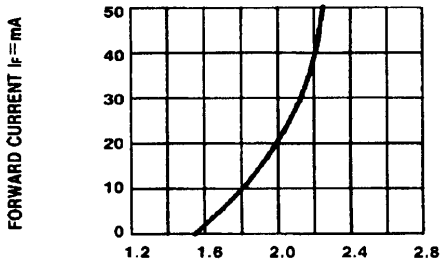
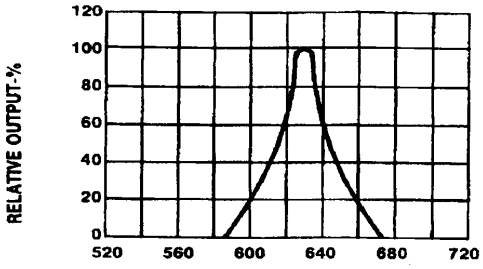
BI-COLOR BARGRAPH (STICK DISPLAY)

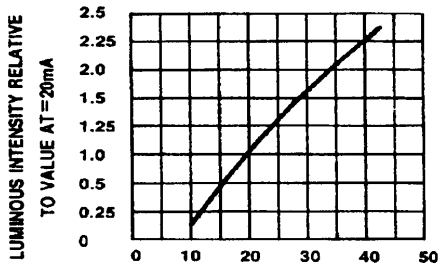
GRAPHICAL DETAIL: High Efficiency Red (T_A = 25°C unless otherwise specified)



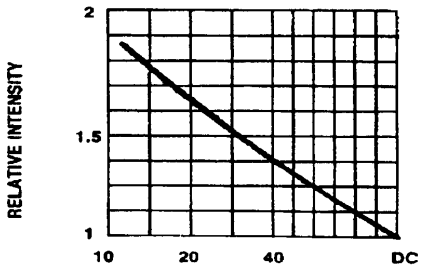
FORWARD VOLTAGE (V_F)-VOLTS
Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.



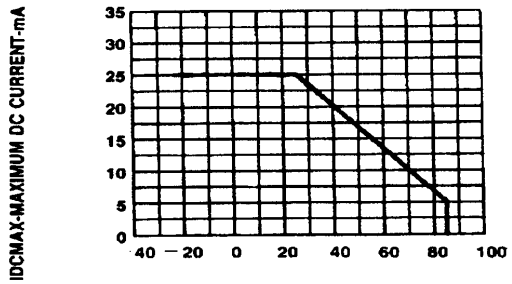
WAVELENGTH (λ)-nm
Fig.2 SPECTRAL RESPONSE



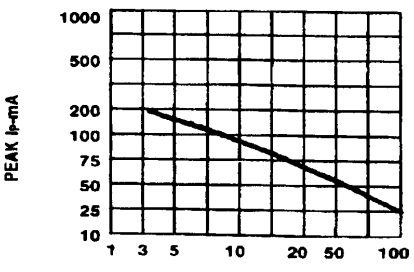
I_F-FORWARD CURRENT-mA
Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



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)

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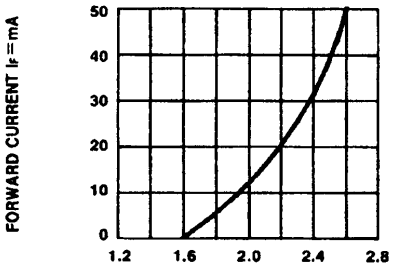
BI-COLOR BARGRAPH (STICK DISPLAY)

GRAPHICAL DETAIL: Green (T_A = 25°C unless otherwise specified)



FORWARD VOLTAGE (VF)-VOLTS
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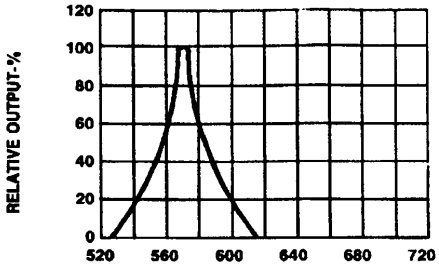
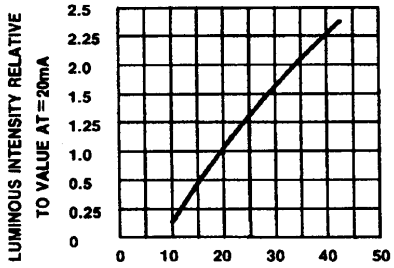
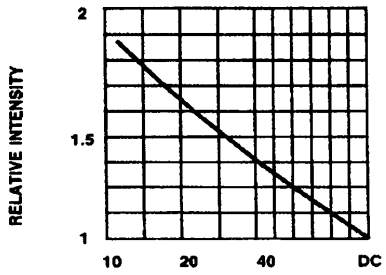


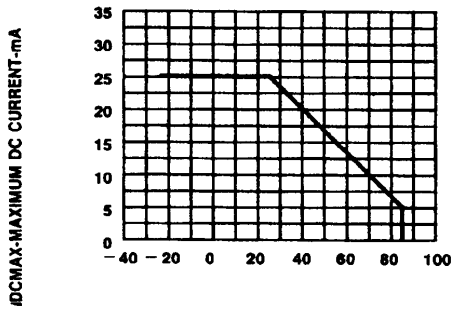
WAVELENGTH (λ)-nm
Fig.2 SPECTRAL RESPONSE



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



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



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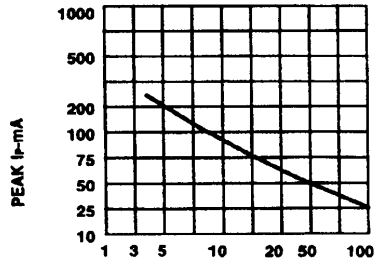

DUTY CYCLE %
Fig. 6 MAX PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE f=1 KHz)

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