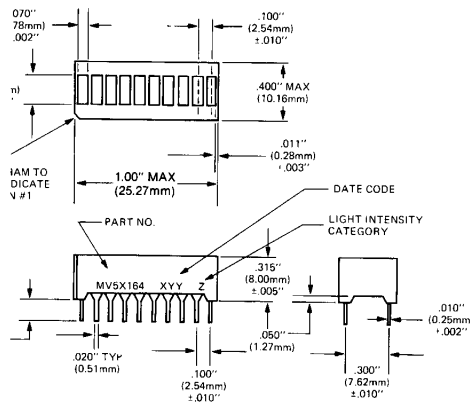




MULTICOLOR BARGRAPH

MV5A164 MV5D164
MV5B164 MV5E164
MV5C164

PACKAGE DIMENSIONS



C1466AA

NOTE: TOLERANCES ± .010" UNLESS SPECIFIED

DESCRIPTION

These are 10 segments multicolor bargraphs with separate anodes and cathode for each segment. The packages are stackable.

FEATURES

- Large segments, closely spaced
- End stackable
- Fast switching — excellent for multiplexing
- Low power consumption
- Directly compatible with ICs.
- Standard 0.3" DIP lead spacing

Custom multicolor bargraphs are available with minimum delivery requirements.

ABSOLUTE MAXIMUM RATING

Power dissipation at 25°C ambient	750 mW
Derate linearly from 50°C	-14.3 mW/°C
Storage and operating temperature	-40°C to 85°C
Continuous forward current	
Total	200 mA
Per segment	25 mA
Reverse voltage	
Per segment	6 V
Soldering time at 260°C	5 Sec.

TYPICAL THERMAL CHARACTERISTICS

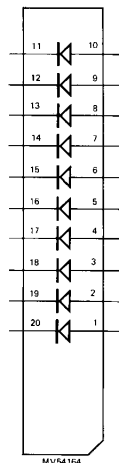
Thermal resistance Junction to free air θ_{JA}	160°C/W
Wavelength temperature coefficient (case temperature)	1.0 A/°C
Forward voltage temperature coefficient	
Yellow	-1.5 mV/°C,
Green	-1.4 mV/°C,
HER	-2.0 mV/°C

ELECTRO-OPTICAL CHARACTERISTICS

(25°C Free Air Temperature Unless Otherwise Specified)

CONDITIONS	MIN	TYP	MAX	UNITS	TEST
Forward voltage (HER, Green, Yellow)		2.2	3.0	V	$I_f = 10 \text{ mA}$
Luminous intensity (average)	510	1800		μCd	$I_f = 10 \text{ mA}$
Peak emission wavelength					
High efficiency red (HER)		630		nm	
Green		562		nm	
Yellow		585		nm	
Spectral line half width		40		nm	
Dynamic resistance — segment		26		ohm	$I_f = 20 \text{ mA}$
Switching time		500		ns	
Reverse voltage		6.0		V	$I_R = 100 \mu\text{A}$

INTERNAL CIRCUIT DIAGRAMS



Pin connections

Pin No	Electrical connections	Pin No	Electrical connections
1	Bar 1 anode	11	Bar 10 cathode
2	Bar 2 anode	12	Bar 9 cathode
3	Bar 3 anode	13	Bar 8 cathode
4	Bar 4 anode	14	Bar 7 cathode
5	Bar 5 anode	15	Bar 6 cathode
6	Bar 6 anode	16	Bar 5 cathode
7	Bar 7 anode	17	Bar 4 cathode
8	Bar 8 anode	18	Bar 3 cathode
9	Bar 9 anode	19	Bar 2 cathode
10	Bar 10 anode	20	Bar 1 cathode

C14/71

MULTICOLOR BARGRAPH SEGMENT COLOR

Segment	MV5A164	MV5B164	MV5C164	MV5D164	MV5E164
1	HER	HER	Green	Green	Green
2	HER	HER	Green	Green	Yellow
3	HER	Yellow	Green	Green	Yellow
4	Yellow	Yellow	Green	Green	Yellow
5	Yellow	Green	Green	Green	Yellow
6	Yellow	Green	Green	HER	Yellow
7	Yellow	Yellow	Yellow	HER	Yellow
8	Green	Yellow	Yellow	HER	HER
9	Green	HER	Yellow	HER	HER
10	Green	HER	HER	Yellow	HER