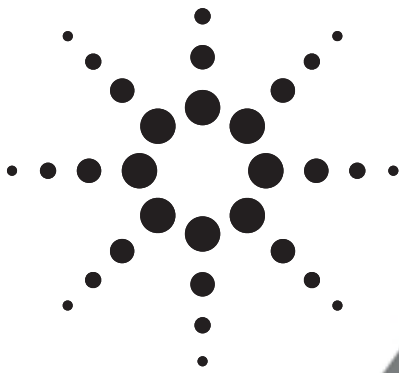


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Agilent HDSP-521A/523A

14.22 mm (0.56 inch) Dual Digit General Purpose Seven Segment Display

Data Sheet



Description

The 14.22 mm (0.56 inch) LED dual digit seven segment displays use industry standard size package and pinout. The device is available in either common anode or common cathode. These gray face displays are suitable for indoor use.

Devices

AlGaAs Red	Description
HDSP-521A	Common Anode Right Hand Decimal
HDSP-523A	Common Cathode Right Hand Decimal

Features

- **Industry standard size**
- **Industry standard pinout**
14.22 mm (0.56 inch)
DIP lead on 2.54 mm
- **AlGaAs Red color**
- **Excellent appearance**
Evenly lighted segments gray package gives optimum contrast
 ± 50 ft. viewing angle
- **Design flexibility**
Common anode right hand decimal point or common cathode right hand decimal point

Applications

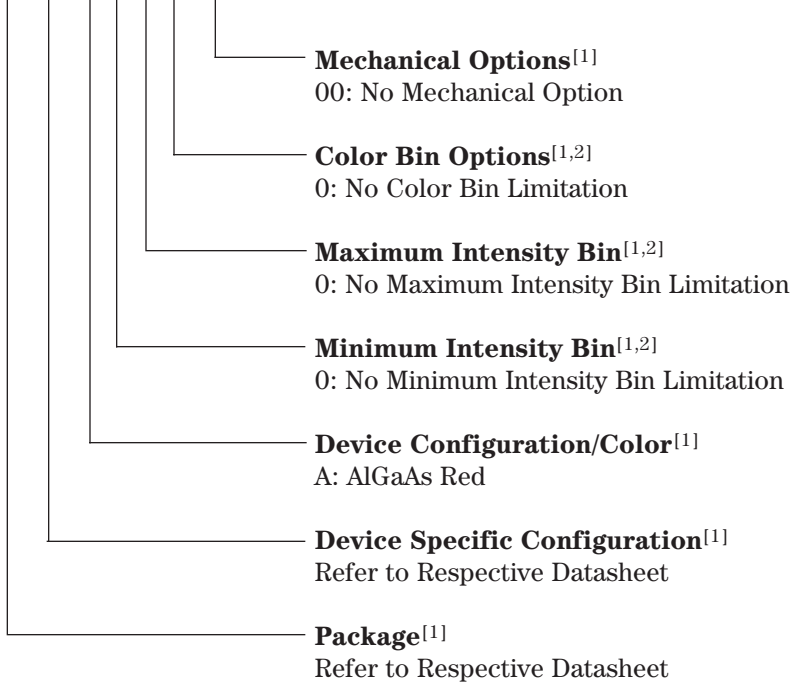
- **Suitable for indoor use**
- **Not recommended for industrial application, i.e., operating temperature requirements exceeding $+85^{\circ}\text{C}$ or below -25°C ^[1]**
- **Extreme temperature cycling not recommended**

Note:

1. For additional details, please contact your local Agilent sales office or an authorized distributor.

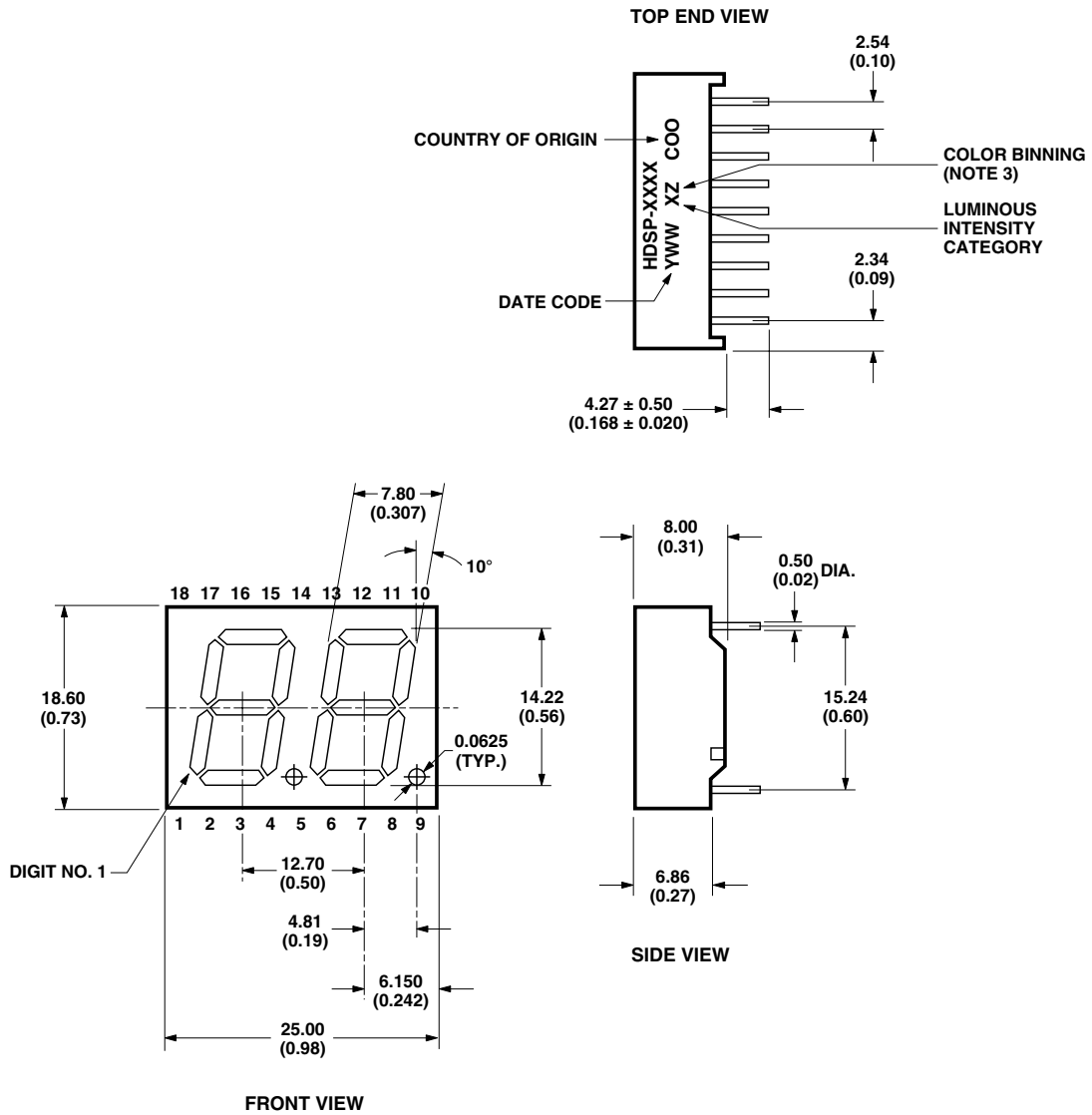
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Part Numbering System

5082 -X X X X-X X X X X
HDSP-X X X X-X X X X X

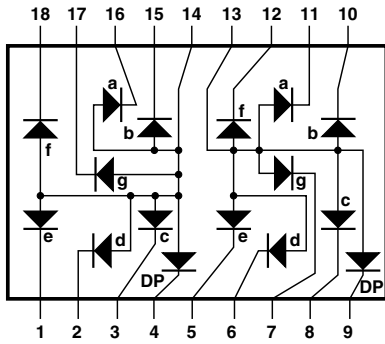


Notes:

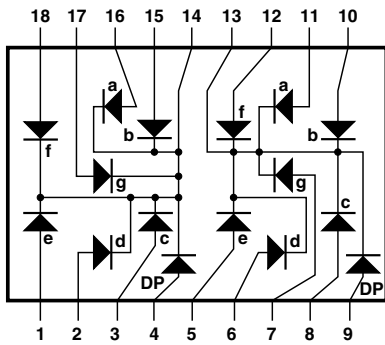
1. For codes not listed in the figure above, please refer to the respective datasheet or contact your nearest Agilent representative for details.
2. Bin options refer to shippable bins for a part number. Color and Intensity Bins are typically restricted to 1 bin per tube (exceptions may apply). Please refer to respective datasheet for specific bin limit information.



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES).



COMMON ANODE



COMMON CATHODE

COMMON ANODE		COMMON CATHODE	
PIN	FUNCTION	PIN	FUNCTION
1	E CATHODE NO. 1	1	E ANODE NO. 1
2	D CATHODE NO. 1	2	D ANODE NO. 1
3	C CATHODE NO. 1	3	C ANODE NO. 1
4	DP CATHODE NO. 1	4	DP ANODE NO. 1
5	E CATHODE NO. 2	5	E ANODE NO. 2
6	D CATHODE NO. 2	6	D ANODE NO. 2
7	G CATHODE NO. 2	7	G ANODE NO. 2
8	C CATHODE NO. 2	8	C ANODE NO. 2
9	DP CATHODE NO. 2	9	DP ANODE NO. 2
10	B CATHODE NO. 2	10	B ANODE NO. 2
11	A CATHODE NO. 2	11	A ANODE NO. 2
12	F CATHODE NO. 2	12	F ANODE NO. 2
13	DIGIT NO. 2 ANODE	13	DIGIT NO. 2 CATHODE
14	DIGIT NO. 1 ANODE	14	DIGIT NO. 1 CATHODE
15	B CATHODE NO. 1	15	B ANODE NO. 1
16	A CATHODE NO. 1	16	A ANODE NO. 1
17	G CATHODE NO. 1	17	G ANODE NO. 1
18	F CATHODE NO. 1	18	F ANODE NO. 1

Absolute Maximum Ratings at T_A = 25°C

Description	AlGaAs Red HDSP-52xA	Units
Power Dissipation Segment	30	mW
Forward Current Segment	15 ^[1]	mA
Peak Forward Current per Segment (1/10 Duty Factor at 10 KHz)	80	mA
Operating Temperature Range	-35 to +85	°C
Storage Temperature Range	-35 to +85	°C
Reverse Voltage per Segment or DP	5	V
Wavesoldering Temperature for 3 seconds (at 2 mm Distance from the bodyz)	250	°C

Note:

1. Derate above 25°C at 0.2 mA/°C.

Intensity Bin Limits (mcd at 10 mA)

Bin Name	AlGaAs Red	
	Min. ^[1]	Max. ^[1]
J	3.201	5.050
K	5.051	8.000
L	8.001	12.650

Note:

1. Tolerance for each bin limit is ±10%.

AlGaAs Red

Device	Parameter	Symbol	Min.	Typ.	Max.	Units	Test Conditions
521A	Luminous Intensity/Segment	I_V		3.66		mcd	$I_F = 5\text{ mA}$
523A			3.201	6.500	mcd	$I_F = 10\text{ mA}$	
	Forward Voltage	V_F		1.85	2.00	V	$I_F = 20\text{ mA}$
	Peak Wavelength	λ_{PEAK}		660		nm	
	Dominant Wavelength	λ_d		643		nm	
	Reverse Voltage	V_R	5			V	$I_R = 100\ \mu\text{A}$

AlGaAs Red

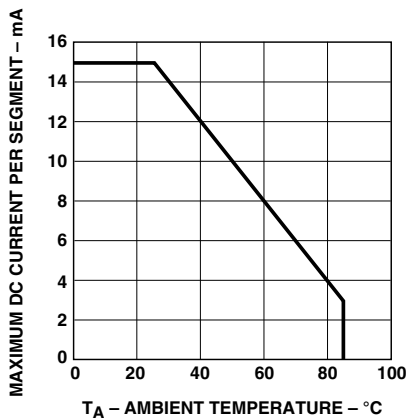


Figure 1. Maximum allowable average or DC current vs. ambient temperature.

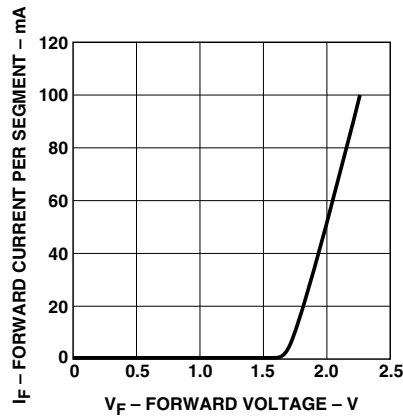


Figure 2. Forward current vs. forward voltage.

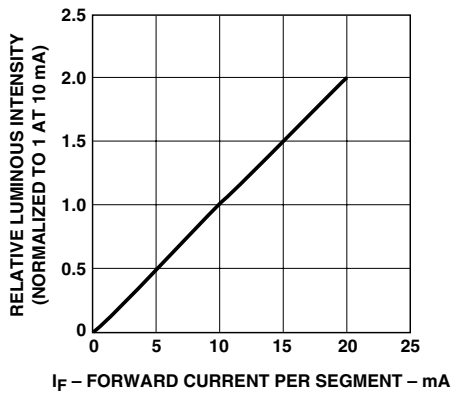


Figure 3. Relative luminous intensity vs. DC forward current.

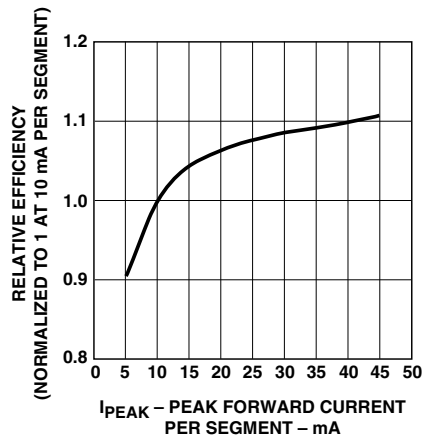


Figure 4. Relative efficiency (luminous intensity per unit current) vs. peak current.

查询"HDSP-521A"供应商

www.agilent.com/semiconductors

For product information and a complete list of distributors, please go to our web site.

For technical assistance call:

Americas/Canada: +1 (800) 235-0312 or
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Europe: +49 (0) 6441 92460

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Hong Kong: (+65) 6756 2394

India, Australia, New Zealand: (+65) 6755 1939

Japan: (+81 3) 3335-8152(Domestic/
International), or 0120-61-1280(Domestic Only)

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Data subject to change.

Obsoletes 5980-2919EN

June 30, 2004

5988-2970EN



Agilent Technologies