

**CIMD6A**  
**SURFACE MOUNT**  
**DUAL COMPLEMENTARY**  
**SILICON DIGITAL**  
**TRANSISTORS**  
**50V, 100mA**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CIMD6A is a Dual Complementary Digital Transistor in a SUPERmini™ SOT-26R surface mount package, designed for switching applications, interface circuit and driver circuit applications.

**MARKING CODE: CD6**



**MAXIMUM RATINGS PER TRANSISTOR: (T<sub>A</sub>=25°C)**

	<b>SYMBOL</b>		<b>UNITS</b>
Collector-Emitter Voltage	V <sub>CEO</sub>	50	V
Collector-Base Voltage	V <sub>CBO</sub>	50	V
Emitter-Base Voltage	V <sub>EBO</sub>	5.0	V
Continuous Collector Current	I <sub>C</sub>	100	mA
Power Dissipation	P <sub>D</sub>	350	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-55 to +150	°C
Thermal Resistance	θ <sub>JA</sub>	357	°C/W

**ELECTRICAL CHARACTERISTICS PER TRANSISTOR: (T<sub>A</sub>=25°C)**

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
I <sub>CBO</sub>	V <sub>CB</sub> =50V			500	nA
I <sub>EBO</sub>	V <sub>EB</sub> =4.0V			500	nA
BV <sub>CBO</sub>	I <sub>C</sub> =50μA	50			V
BV <sub>CEO</sub>	I <sub>C</sub> =1.0mA	50			V
BV <sub>EBO</sub>	I <sub>E</sub> =50μA	5.0			V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =5.0mA, I <sub>B</sub> =250μA			0.3	V
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =1.0mA	100		600	
* f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =5.0mA, f=100MHz		250		MHz
R <sub>1</sub> =R <sub>2</sub>	-	3.3	4.7	6.1	KΩ

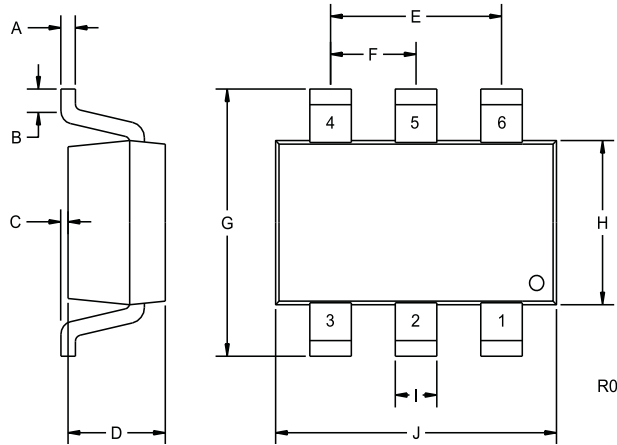
\* Characteristic of transistor only

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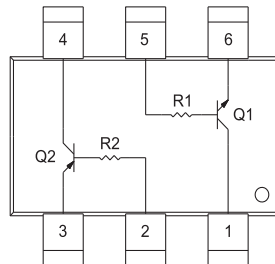
**SOT-26R CASE - MECHANICAL OUTLINE**  
with Reverse Pin Configuration



Note: The R suffix added to case type indicates reverse pin configuration as compared with a standard SOT-26 case. All other package specifications are equivalent to SOT-26 package. Please refer to SOT-26 Package Details datasheet for Mounting Pad Geometry, Tape Dimensions & Orientation, Packaging Base, Reel Labeling & Packing Information, and Ordering information.

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.007	0.11	0.19
B	0.016	-	0.40	-
C	-	0.004	-	0.10
D	0.039	0.047	1.00	1.20
E	0.074	0.075	1.88	1.92
F	0.037	0.038	0.93	0.97
G	0.102	0.118	2.60	3.00
H	0.059	0.067	1.50	1.70
I	0.016		0.41	
J	0.110	0.118	2.80	3.00

SOT-26R (REV: R0)



**LEAD CODE:**

- 1) COLLECTOR Q1
- 2) BASE Q2
- 3) EMITTER Q2
- 4) COLLECTOR Q2
- 5) BASE Q1
- 6) EMITTER Q1

**MARKING CODE: CD6**

R3 (4-January 2010)