

CIMD6A

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



SOT-26R CASE

Central™

Semiconductor Corp.

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 ($T_A=25^\circ\text{C}$)

Collector-Emitter Voltage
Collector-Base Voltage
Emitter-Base Voltage
Collector Current
Power Dissipation
Operating and Storage
Junction Temperature
Thermal Resistance

SYMBOL

V_{CEO} 50
 V_{CBO} 50
 V_{EBO} 5.0
 I_C 100
 P_D 350
 T_J, T_{stg} -55 to +150
 θ_{JA} 357

UNITS

V
V
V
mA
mW
°C
°C/W

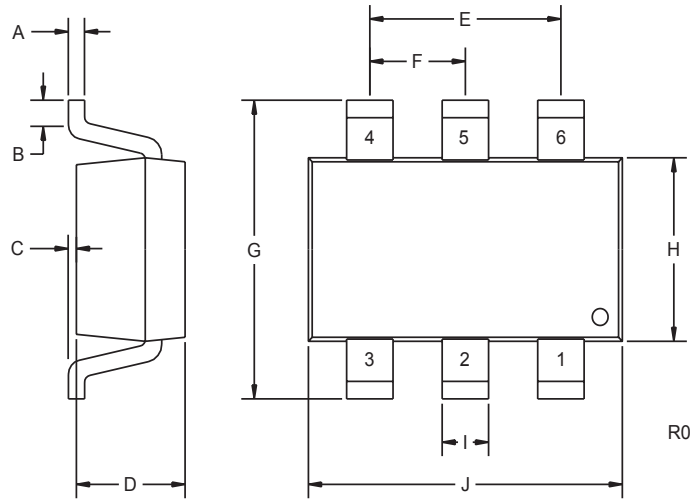
ELECTRICAL CHARACTERISTICS PER TRANSISTOR ($T_A=25^\circ\text{C}$)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{CBO}	$V_{CB}=50\text{V}$			500	nA
I_{EBO}	$V_{EB}=4.0\text{V}$			500	nA
BV_{CBO}	$I_C=50\mu\text{A}$	50			V
BV_{CEO}	$I_C=1.0\text{mA}$	50			V
BV_{EBO}	$I_E=50\mu\text{A}$	5.0			V
$V_{CE(SAT)}$	$I_C=5.0\text{mA}, I_B=250\mu\text{A}$			0.3	V
h_{FE}	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}$	100		600	
* f_T	$V_{CE}=10\text{V}, I_C=5.0\text{mA}, f=100\text{MHz}$		250		MHz
$R_1=R_2$	-	3.3	4.7	6.1	K Ω

* Characteristic of transistor only

R2 (6-August 2003)

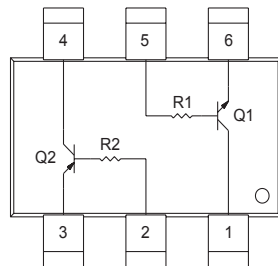
**SOT-26R CASE - MECHANICAL OUTLINE
with Reverse Pin Configuration**



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