

CIMD6A

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

SUPERmini™



SOT-26R CASE



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_A=25°C)

| | SYMBOL | | UNITS |
|--|-----------------------------------|-------------|-------|
| Collector-Emitter Voltage | V _{CEO} | 50 | V |
| Collector-Base Voltage | V _{CBO} | 50 | V |
| Emitter-Base Voltage | V _{EBO} | 5.0 | V |
| Continuous Collector Current | I _C | 100 | mA |
| Power Dissipation | P _D | 350 | mW |
| Operating and Storage Junction Temperature | T _J , T _{stg} | -55 to +150 | °C |
| Thermal Resistance | θ _{JA} | 357 | °C/W |

ELECTRICAL CHARACTERISTICS PER TRANSISTOR: (T_A=25°C)

| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|--------------------------------|---|-----|-----|-----|-------|
| I _{CBO} | V _{CB} =50V | | | 500 | nA |
| I _{EBO} | V _{EB} =4.0V | | | 500 | nA |
| BV _{CBO} | I _C =50μA | 50 | | | V |
| BV _{CEO} | I _C =1.0mA | 50 | | | V |
| BV _{EBO} | I _E =50μA | 5.0 | | | V |
| V _{CE(SAT)} | I _C =5.0mA, I _B =250μA | | | 0.3 | V |
| h _{FE} | V _{CE} =5.0V, I _C =1.0mA | 100 | | 600 | |
| * f _T | V _{CE} =10V, I _C =5.0mA, f=100MHz | | 250 | | MHz |
| R ₁ =R ₂ | - | 3.3 | 4.7 | 6.1 | KΩ |

* Characteristic of transistor only

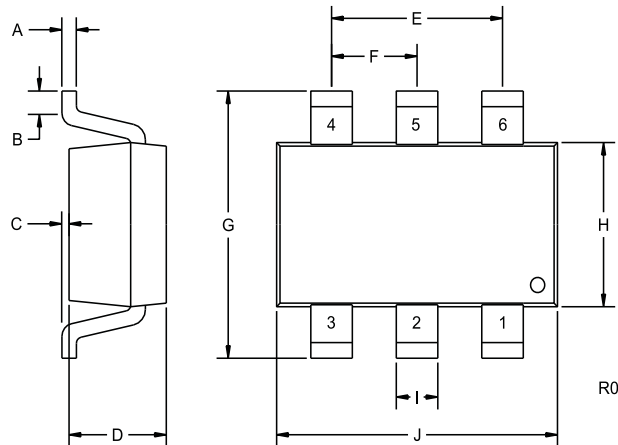
R3 (4-January 2010)

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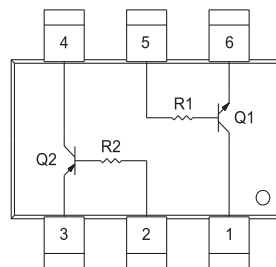
SOT-26R CASE - MECHANICAL OUTLINE
with Reverse Pin Configuration



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.

| DIMENSIONS | | | | |
|------------|--------|-------|-------------|------|
| 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

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R3 (4-January 2010)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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