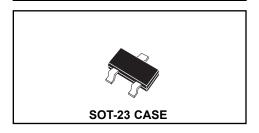
#### CMPD2836 CMPD2838

## DUAL SILICON SWITCHING DIODE





#### **DESCRIPTION:**

The Central Semiconductor CMPD2836 and CMPD2838 types are ultra-high speed switching diodes manufactured by the epitaxial planar process, in an epoxy molded surface mount package, designed for high speed switching applications.

The following configurations are available:

CMPD2836DUAL, COMMON ANODEMARKING CODE: CA2CMPD2838DUAL, COMMON CATHODEMARKING CODE: CA6

MAXIMUM RATINGS: (T<sub>A</sub>=25°C)

|                                 | SYMBOL                            | UNITS       |      |
|---------------------------------|-----------------------------------|-------------|------|
| Peak Repetitive Reverse Voltage | $V_{RRM}$                         | 75          | V    |
| Average Forward Current         | IO                                | 200         | mA   |
| Peak Forward Current            | I <sub>FM</sub>                   | 300         | mA   |
| Power Dissipation               | $P_{D}$                           | 350         | mW   |
| Operating and Storage           |                                   |             |      |
| Junction Temperature            | T <sub>J</sub> , T <sub>stg</sub> | -65 to +150 | °C   |
| Thermal Resistance              | $\Theta_{\sf JA}$                 | 357         | °C/W |

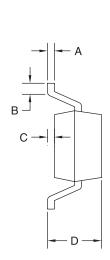
| ELECTRICAL CHARACTERISTICS PER DIODE: |  | (T <sub>A</sub> =25°C unless otherwise noted) |     |     |       |
|---------------------------------------|--|---|-----|-----|-------|
| SYMBOL                                | TEST CONDITIONS                            | MIN   | TYP | MAX | UNITS |
| $BV_R$                                | I <sub>R</sub> =100μA                      | 75  |     |     | V     |
| $I_R$                                 | V <sub>R</sub> =50V                        |   |     | 100 | nA    |
| $V_{F}$                               | I <sub>F</sub> =10mA                       |   |     | 1.0 | V     |
| $V_{F}$                               | I <sub>F</sub> =50mA                       |   |     | 1.0 | V     |
| $V_{F}$                               | I <sub>F</sub> =100mA                      |   |     | 1.2 | V     |
| $C_{T}$                               | $V_R$ =0, f=1.0MHz                         |   | 1.5 | 4.0 | pF    |
| t <sub>rr</sub>                       | $I_R=I_F=10$ mA, $R_L=100\Omega$ , Rec. to | o 1.0mA                                       |     | 4.0 | ns    |

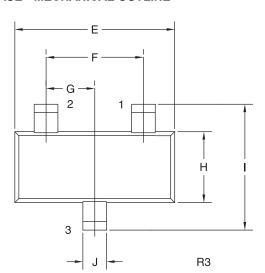


#### CMPD2836 CMPD2838

# DUAL SILICON SWITCHING DIODE

### **SOT-23 CASE - MECHANICAL OUTLINE**

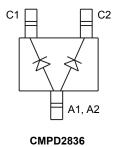


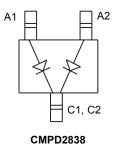


MARKING CODE: CMPD2836: CA2 CMPD2838: CA6

| DIMENSIONS |        |       |             |      |  |  |
|------------|--------|-------|-------------|------|--|--|
|            | INCHES |       | MILLIMETERS |      |  |  |
| SYMBOL     | MIN    | MAX   | MIN         | MAX  |  |  |
| Α          | 0.003  | 0.007 | 0.08        | 0.18 |  |  |
| В          | 0.006  | -     | 0.15        | -    |  |  |
| С          | -      | 0.005 | -           | 0.13 |  |  |
| D          | 0.035  | 0.043 | 0.89        | 1.09 |  |  |
| E          | 0.110  | 0.120 | 2.80        | 3.05 |  |  |
| F          | 0.075  |       | 1.90        |      |  |  |
| G          | 0.037  |       | 0.95        |      |  |  |
| Н          | 0.047  | 0.055 | 1.19        | 1.40 |  |  |
|            | 0.083  | 0.098 | 2.10        | 2.49 |  |  |
| J          | 0.014  | 0.020 | 0.35        | 0.50 |  |  |

SOT-23 (REV: R3)





R4 (13-November 2002)