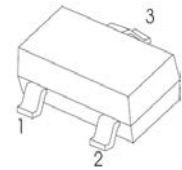


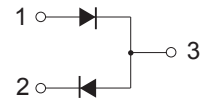
#### FEATURES

CMSD2004S type is a silicon switching dual in series diode manufactured by the epitaxial planar process, designed for applications requiring high voltage capability. Power dissipation

MARKING : B6D



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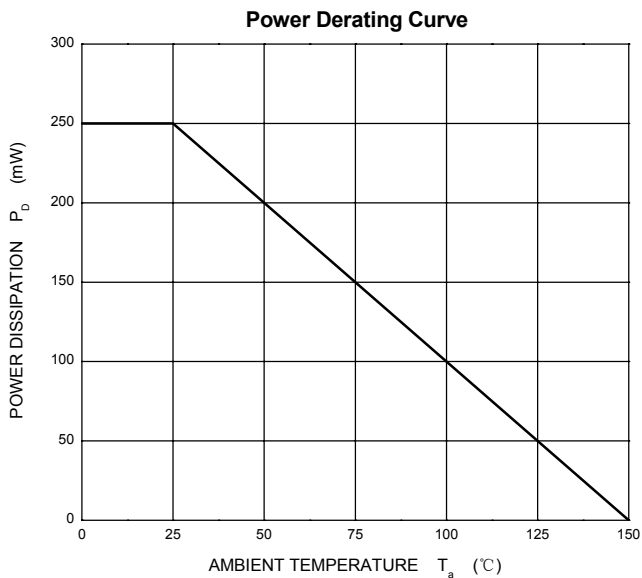
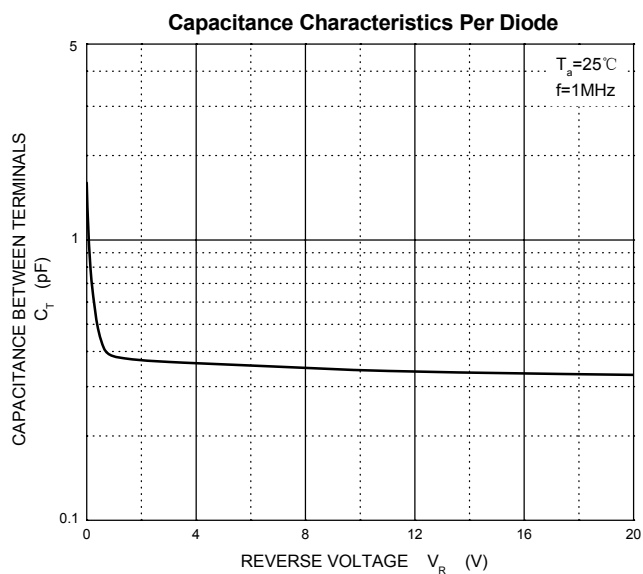
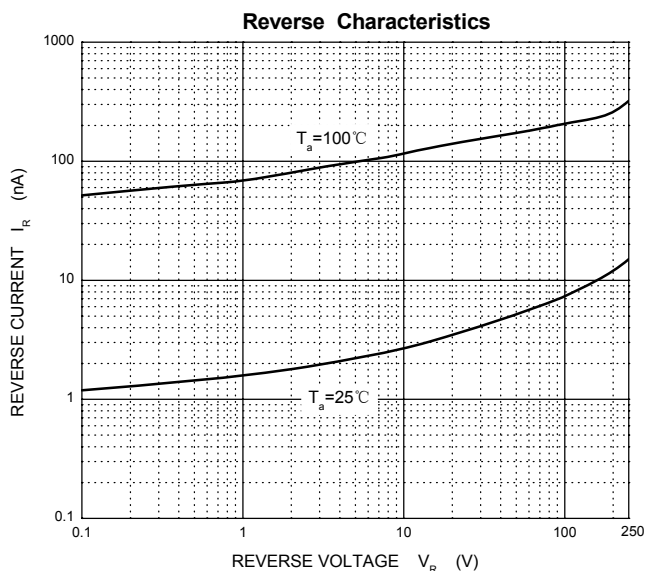
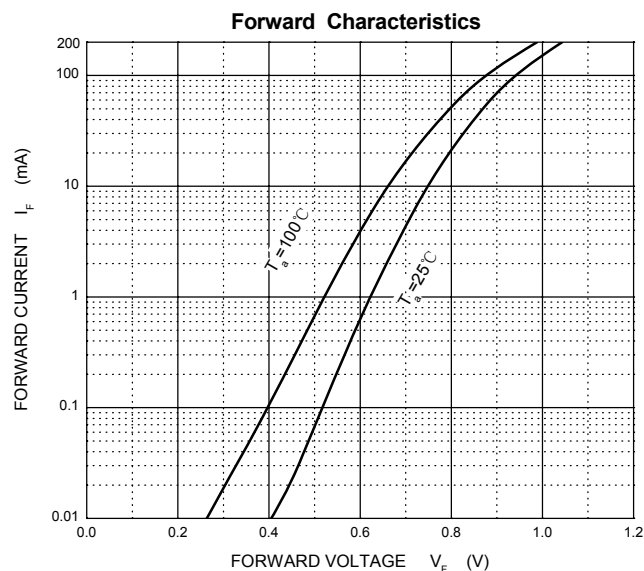


#### Maximum Ratings @Ta=25°C

| Parameter                                          | Symbol          | Limit    | Unit |
|----------------------------------------------------|-----------------|----------|------|
| Non-Repetitive Peak Reverse Voltage                | $V_{RM}$        | 300      | V    |
| DC Blocking Voltage                                | $V_R$           | 240      | V    |
| Average Rectified Output Current                   | $I_o$           | 200      | mA   |
| Continuous Forward Current                         | $I_F$           | 225      | mA   |
| Peak Repetitive Forward Current                    | $I_{FRM}$       | 625      | mA   |
| Non-Repetitive Peak Forward Surge Current @t=8.3ms | $I_{FSM}$       | 2.5      | A    |
| Power Dissipation                                  | $P_D$           | 250      | mW   |
| Thermal Resistance From Junction to Ambient        | $R_{\theta JA}$ | 500      | °C/W |
| Operation Junction and Storage Temperature Range   | $T_J, T_{STG}$  | -55~+150 | °C   |

#### ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

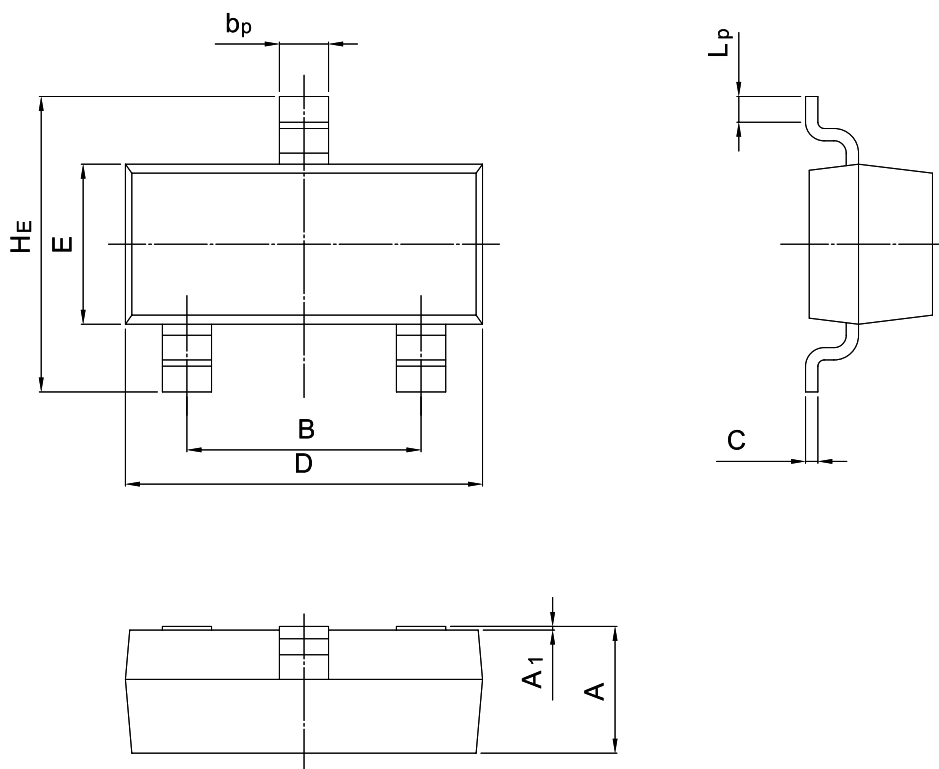
| Parameter                       | Symbol     | Test conditions                     | Min | Max | Unit    |
|---------------------------------|------------|-------------------------------------|-----|-----|---------|
| Reverse breakdown voltage       | $V_{(BR)}$ | $I_R = 100\mu A$                    | 240 |     | V       |
| Reverse voltage leakage current | $I_R$      | $V_R = 240V$                        |     | 0.1 | $\mu A$ |
| Forward voltage                 | $V_F$      | $I_F = 100mA$                       |     | 1   | V       |
| Diode capacitance               | $C_D$      | $V_R = 0V$ $f = 1MHz$               |     | 5   | pF      |
| Reveres recovery time           | $t_{rr}$   | $I_F = I_R = 30mA, R_L = 100\Omega$ |     | 50  | ns      |



### PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

#### SOT-23



| UNIT | A            | B            | b <sub>p</sub> | C            | D            | E            | H <sub>E</sub> | A <sub>1</sub> | L <sub>p</sub> |
|------|--------------|--------------|----------------|--------------|--------------|--------------|----------------|----------------|----------------|
| mm   | 1.40<br>0.95 | 2.04<br>1.78 | 0.50<br>0.35   | 0.19<br>0.08 | 3.10<br>2.70 | 1.65<br>1.20 | 3.00<br>2.20   | 0.100<br>0.013 | 0.50<br>0.20   |

