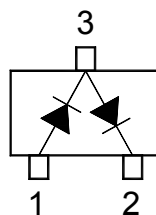
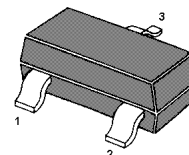


### SURFACE MOUNT SWITCHING DIODE



Marking Code: D4



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### Absolute Maximum Ratings ( $T_a = 25\text{ }^{\circ}\text{C}$ )

| Parameter                                                                                       | Symbol      | Value         | Unit               |
|-------------------------------------------------------------------------------------------------|-------------|---------------|--------------------|
| Maximum Repetitive Reverse Voltage                                                              | $V_{RRM}$   | 100           | V                  |
| Reverse Voltage                                                                                 | $V_R$       | 75            | V                  |
| Average Rectified Current                                                                       | $I_{F(AV)}$ | 200           | mA                 |
| DC Forward Current                                                                              | $I_{FM}$    | 600           | mA                 |
| Recurrent Peak Forward Current                                                                  | $I_{FRM}$   | 700           | mA                 |
| Non-repetitive Peak Forward Surge Current<br>at pulse width = 1 s<br>at pulse width = 1 $\mu$ s | $I_{FSM}$   | 1<br>2        | A                  |
| Total Device Dissipation                                                                        | $P_{tot}$   | 350           | mW                 |
| Operating Junction Temperature                                                                  | $T_J$       | 150           | $^{\circ}\text{C}$ |
| Storage Temperature Range                                                                       | $T_S$       | - 55 to + 150 | $^{\circ}\text{C}$ |

### Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

| Parameter                                                                                                                           | Symbol      | Min.        | Max.          | Unit                                 |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|---------------|--------------------------------------|
| Forward Voltage<br>at $I_F = 10\text{ mA}$                                                                                          | $V_F$       | -           | 1             | V                                    |
| Reverse Breakdown Voltage<br>at $I_R = 100\text{ }\mu\text{A}$<br>at $I_R = 5\text{ }\mu\text{A}$                                   | $V_{(BR)R}$ | 100<br>75   | -<br>-        | V                                    |
| Reverse Current<br>at $V_R = 20\text{ V}$<br>at $V_R = 75\text{ V}$<br>at $V_R = 20\text{ V}$ , $T_a = 150\text{ }^{\circ}\text{C}$ | $I_R$       | -<br>-<br>- | 25<br>5<br>50 | nA<br>$\mu\text{A}$<br>$\mu\text{A}$ |
| Reverse Recovery Time<br>at $I_F = 10\text{ mA}$ , $V_R = 6\text{ V}$ , $I_{RR} = 1\text{ mA}$ , $R_L = 100\text{ }\Omega$          | $t_{rr}$    | -           | 4             | ns                                   |
| Total Capacitance<br>at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$                                                                     | $C_T$       | -           | 4             | pF                                   |

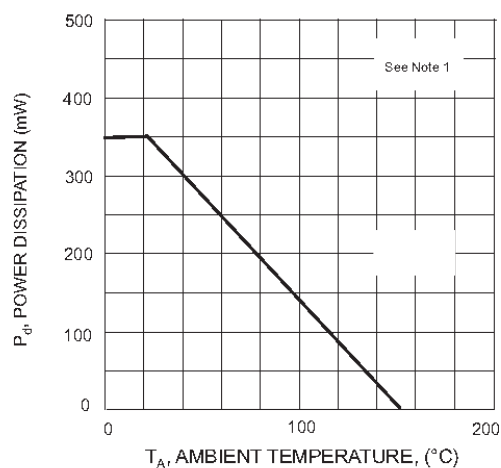


Fig. 1 Power Derating Curve

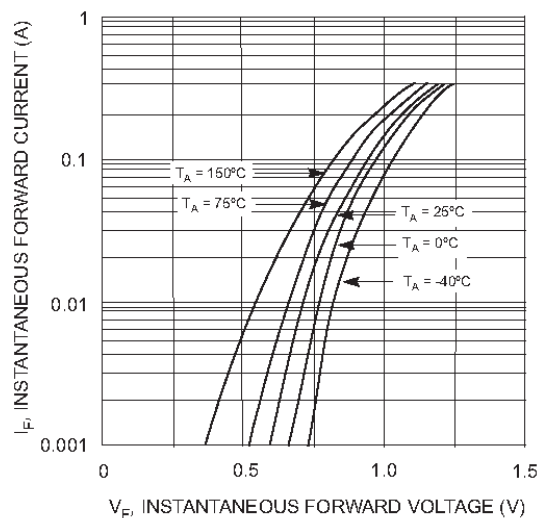


Fig. 2 Forward Characteristics

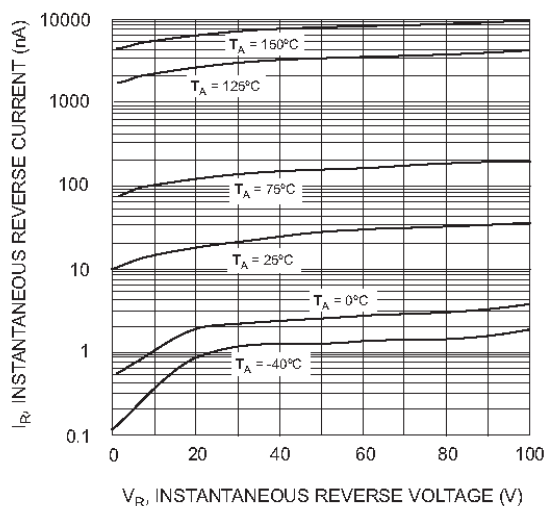


Fig. 3 Typical Reverse Characteristics

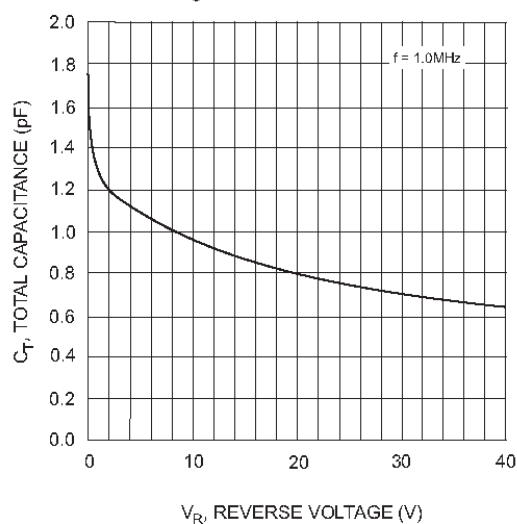
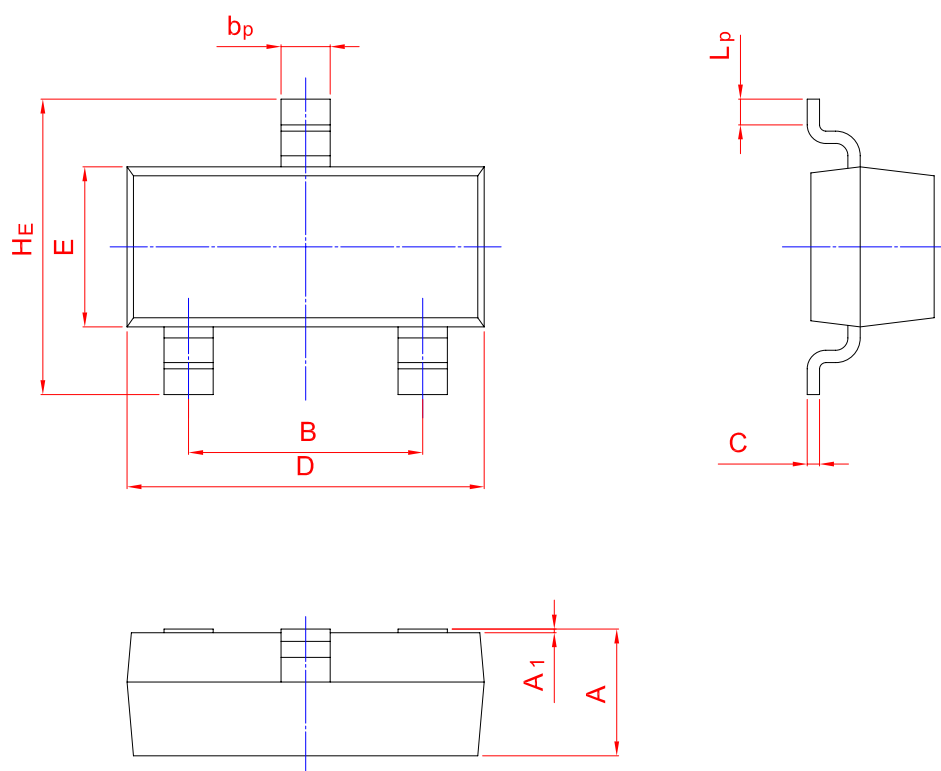


Fig. 4 Typical Capacitance vs. Reverse Voltage

### PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

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| UNIT | A            | B            | bp           | C            | D            | E            | HE           | A1             | Lp           |
|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------------|
| 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 |