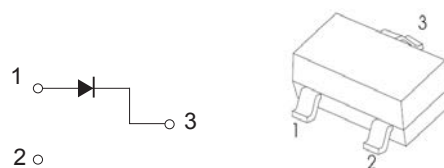


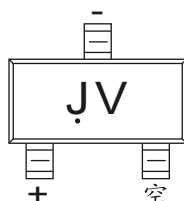
### SWITCHING DIODE

#### FEATURES

- Low leakage current applications
- Medium speed switching times



#### MARKING: JV



JV= Device code  
Solid dot = Green molding compound device.

#### SOT-23

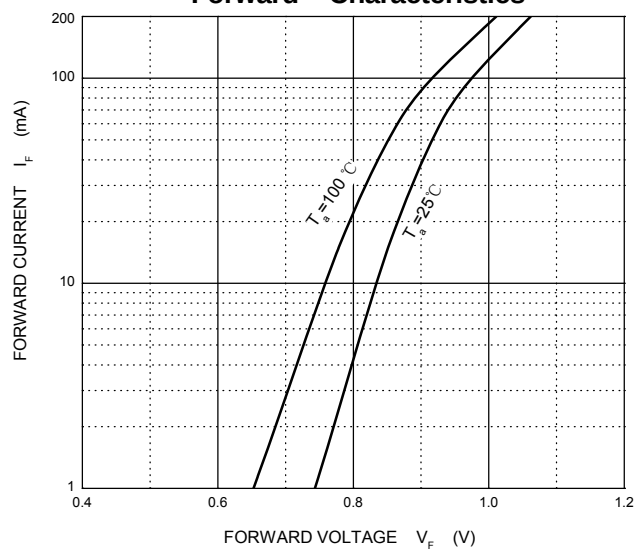
#### Maximum Ratings @Ta=25°C

| Parameter                                          | Symbol         | Limit    | Unit |
|----------------------------------------------------|----------------|----------|------|
| Peak Repetitive Peak Reverse Voltage               | $V_{RRM}$      | 75       | V    |
| Working Peak Reverse Voltage                       | $V_{RWM}$      |          |      |
| DC Blocking Voltage                                | $V_R$          |          |      |
| Forward Continuous Current                         | $I_{FM}$       | 200      | mA   |
| Non-Repetitive Peak Forward Surge Current @t=8.3ms | $I_{FSM}$      | 2.0      | A    |
| Power Dissipation                                  | $P_D$          | 225      | mW   |
| Operation Junction and Storage Temperature Range   | $T_J, T_{STG}$ | -55~+150 | °C   |

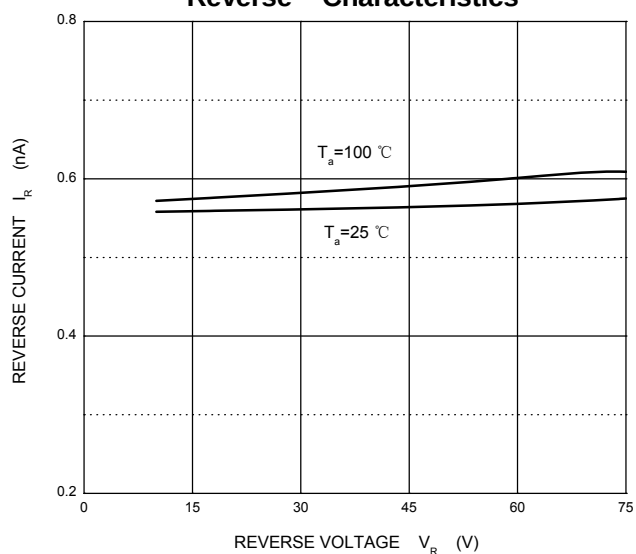
#### Electrical Characteristics @Ta=25°C

| Parameter                 | Symbol     | Min | Typ | Max  | Unit    | Conditions                                           |
|---------------------------|------------|-----|-----|------|---------|------------------------------------------------------|
| Reverse breakdown voltage | $V_{(BR)}$ | 75  |     |      | V       | $I_R=100\mu A$                                       |
| Forward voltage           | $V_{F1}$   |     |     | 0.9  | V       | $I_F=1mA$                                            |
|                           | $V_{F2}$   |     |     | 1    | V       | $I_F=10mA$                                           |
|                           | $V_{F3}$   |     |     | 1.1  | V       | $I_F=50mA$                                           |
|                           | $V_{F4}$   |     |     | 1.25 | V       | $I_F=150mA$                                          |
| Reverse current           | $I_R$      |     |     | 5    | nA      | $V_R=75V$                                            |
| Diode capacitance         | $C_{tot}$  |     | 2   |      | pF      | $V_R=0V, f=1MHz$                                     |
| Reverse recovery time     | $t_{rr}$   |     |     | 3    | $\mu s$ | $I_F=I_R=10mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$ |

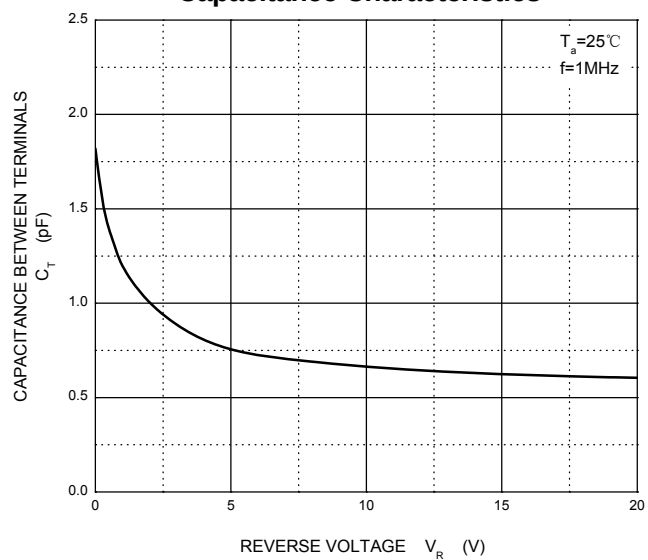
### Forward Characteristics



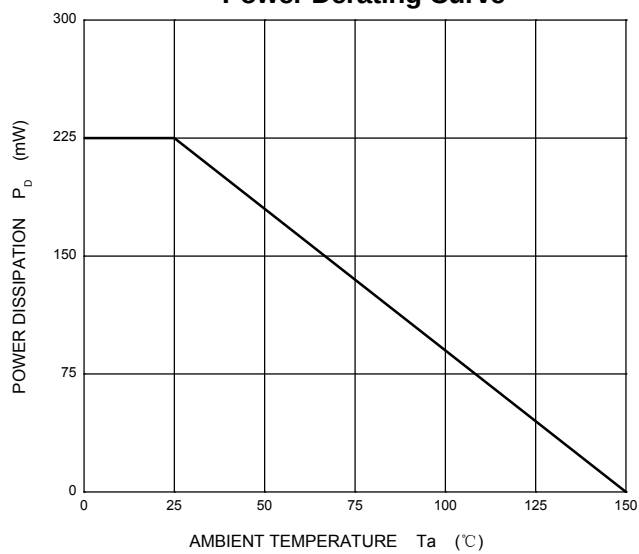
### Reverse Characteristics



### Capacitance Characteristics



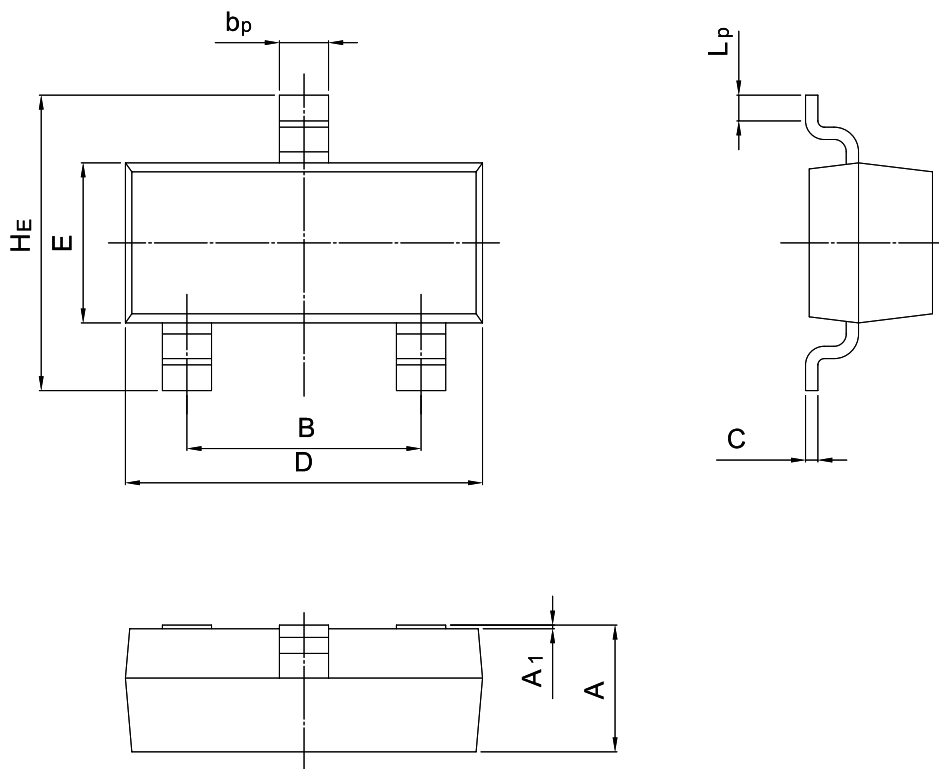
### Power Derating Curve



### PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

### SOT-23



| 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 |

