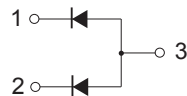
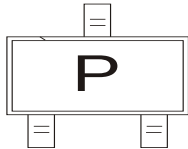
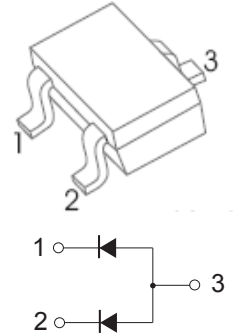


**SOT-323 Plastic-Encapsulate Diodes****DAP202U****Switching Diodes****FEATURES**

- Fast Switching Speed, High Reliability
- Suitable For High Packing Density Layout

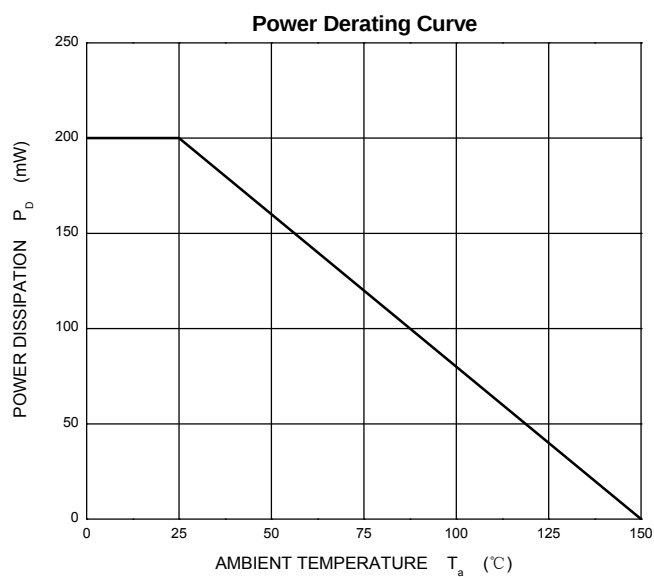
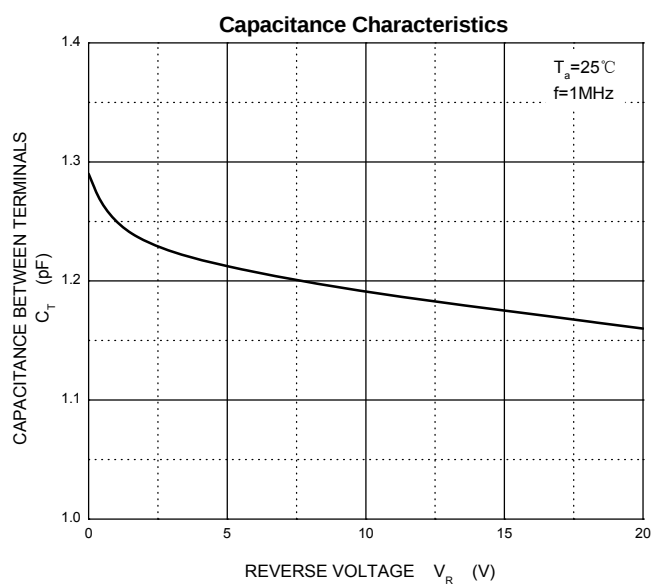
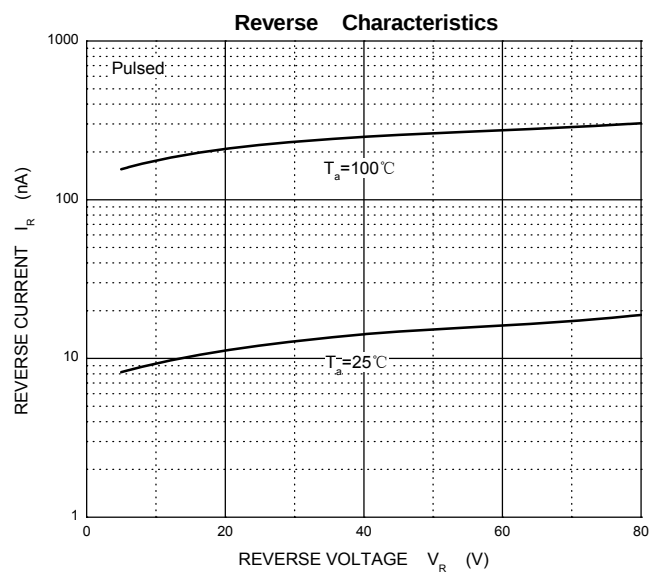
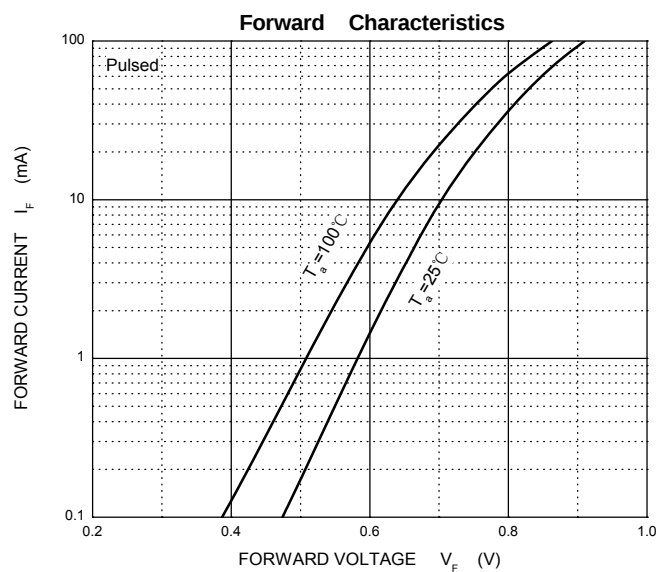
**MARKING****Equivalent Circuit****SOT-323****MAXIMUM RATINGS** ( $T_a=25^{\circ}\text{C}$  unless otherwise noted)

| Parameter                                                    | Symbol          | Limit    | Unit                 |
|--------------------------------------------------------------|-----------------|----------|----------------------|
| Non-Repetitive Peak Reverse Voltage                          | $V_{RM}$        | 80       | V                    |
| DC Blocking Voltage                                          | $V_R$           | 80       | V                    |
| Forward Continuous Current                                   | $I_{FM}$        | 300      | mA                   |
| Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$ | $I_{FSM}$       | 2.0      | A                    |
| Average Rectified Output Current                             | $I_O$           | 100      | mA                   |
| Power Dissipation                                            | $P_D$           | 200      | mW                   |
| Thermal resistance From Junction to ambient                  | $R_{\theta JA}$ | 625      | $^{\circ}\text{C/W}$ |
| Operation Junction and Storage Temperature Range             | $T_J, T_{STG}$  | -55~+150 | $^{\circ}\text{C}$   |

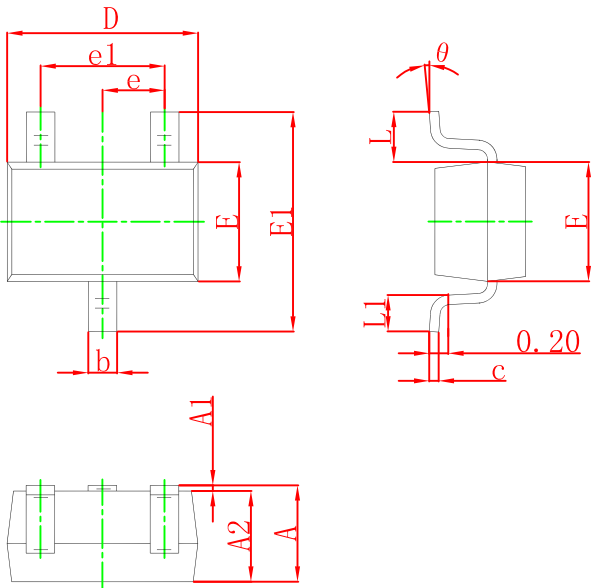
**ELECTRICAL CHARACTERISTICS** ( $T_a=25^{\circ}\text{C}$  unless otherwise specified)

| Parameter                       | Symbol     | Test conditions                 | Min | Max | Unit          |
|---------------------------------|------------|---------------------------------|-----|-----|---------------|
| Reverse breakdown voltage       | $V_{(BR)}$ | $I_R=100\mu\text{A}$            | 80  |     | V             |
| Reverse voltage leakage current | $I_R$      | $V_R=70\text{V}$                |     | 0.1 | $\mu\text{A}$ |
| Forward voltage                 | $V_F$      | $I_F=100\text{mA}$              |     | 1.2 | V             |
| Diode capacitance               | $C_D$      | $V_R=6\text{V}, f=1\text{MHz}$  |     | 3.5 | pF            |
| Reverse recovery time           | $t_{rr}$   | $V_R=6\text{V}, I_F=5\text{mA}$ |     | 4   | ns            |

## Typical Characteristics

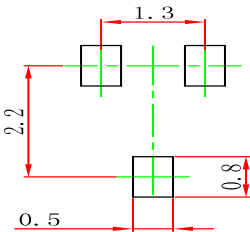


Package Outline Dimensions (SOT-323)



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      | 0.900                     | 1.100 | 0.035                | 0.043 |
| A1     | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2     | 0.900                     | 1.000 | 0.035                | 0.039 |
| b      | 0.200                     | 0.400 | 0.008                | 0.016 |
| c      | 0.080                     | 0.150 | 0.003                | 0.006 |
| D      | 2.000                     | 2.200 | 0.079                | 0.087 |
| E      | 1.150                     | 1.350 | 0.045                | 0.053 |
| E1     | 2.150                     | 2.450 | 0.085                | 0.096 |
| e      | 0.650 TYP                 |       | 0.026 TYP            |       |
| e1     | 1.200                     | 1.400 | 0.047                | 0.055 |
| L      | 0.525 REF                 |       | 0.021 REF            |       |
| L1     | 0.260                     | 0.460 | 0.010                | 0.018 |
| θ      | 0°                        | 8°    | 0°                   | 8°    |

Suggested Pad Layout (SOT-323)



- Note:
- 1.Controlling dimension:in millimeters.
  - 2.General tolerance:± 0.05mm.
  - 3.The pad layout is for reference purposes only.