

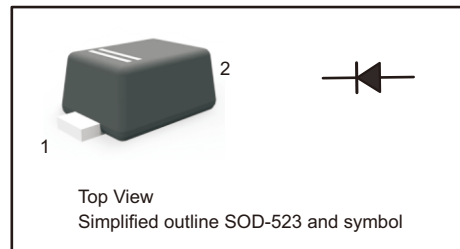
Switching Diodes

FEATURES

- For surface mounted applications
- Fast reverse recovery time
- Ideal for automated placement

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |



Maximum Ratings at 25 °C

| Parameter | Symbols | 1N4148JGT | Units |
|--|--------------|------------|-------|
| Non-Repetitive Peak Reverse Voltage | V_{RM} | 100 | V |
| Reverse Voltage | V_R | 75 | V |
| Peak Repetitive Reverse Voltage | V_{RRM} | | V |
| Working Peak Reverse Voltage | V_{RWM} | | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | | 53 |
| Average Rectified Output Current | I_O | 150 | mA |
| Non-repetitive Peak Forward Surge Current@t= 8.3ms | I_{FSM} | 0.8 | A |
| Power Dissipation | P_D | 150 | mW |
| Junction Temperature | T_j | 150 | °C |
| Storage Temperature | T_{stg} | -55 ~ +150 | °C |

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

| Parameter | Symbols | Test conditions | Min | Typ | Max | Units |
|-----------------------|------------|---|-----|-----|-------|---------|
| Reverse voltage | $V_{(BR)}$ | $I_R = 1\mu A$ | 75 | | | V |
| Reverse current | I_R | $V_R = 75V$ | | | 1 | μA |
| | | $V_R = 20V$ | | | 25 | nA |
| Forward voltage | V_F | $I_F = 1\text{ m A}$ | | | 0.715 | V |
| | | $I_F = 10\text{ m A}$ | | | 0.855 | V |
| | | $I_F = 50\text{ m A}$ | | | 1 | V |
| | | $I_F = 150\text{ m A}$ | | | 1.25 | V |
| Total capacitance | C_{tot} | $V_R = 0V, f = 1\text{ MHz}$ | | | 2 | pF |
| Reverse recovery time | t_{rr} | $I_F = I_R = 10\text{ mA}, I_{rr} = 0.1 * I_R, R_L = 100\ \Omega$ | | | 4 | ns |



Fig.1 Power Derating Curve

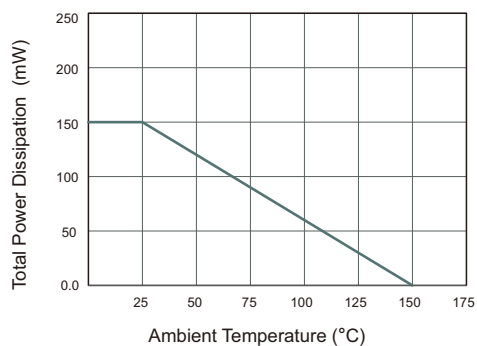


Fig.2 Typical Reverse Characteristics

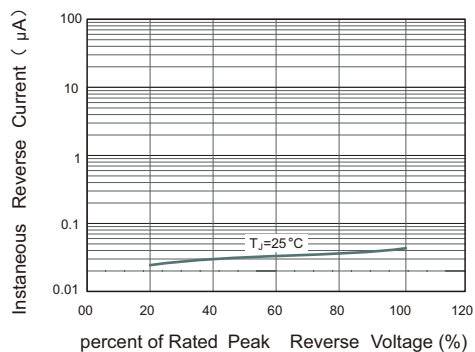


Fig.3 Typical Instantaneous Forward Characteristics

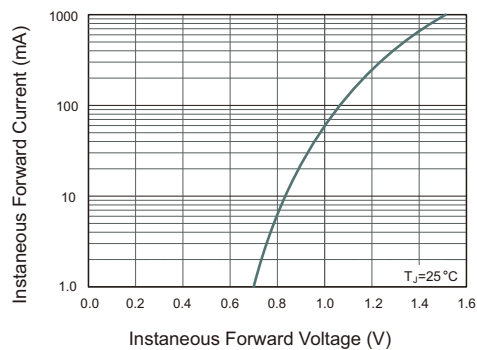
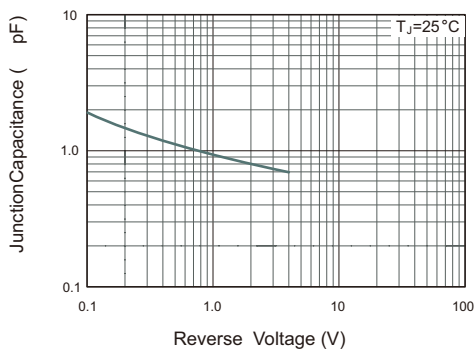


Fig.4 Typical Junction Capacitance

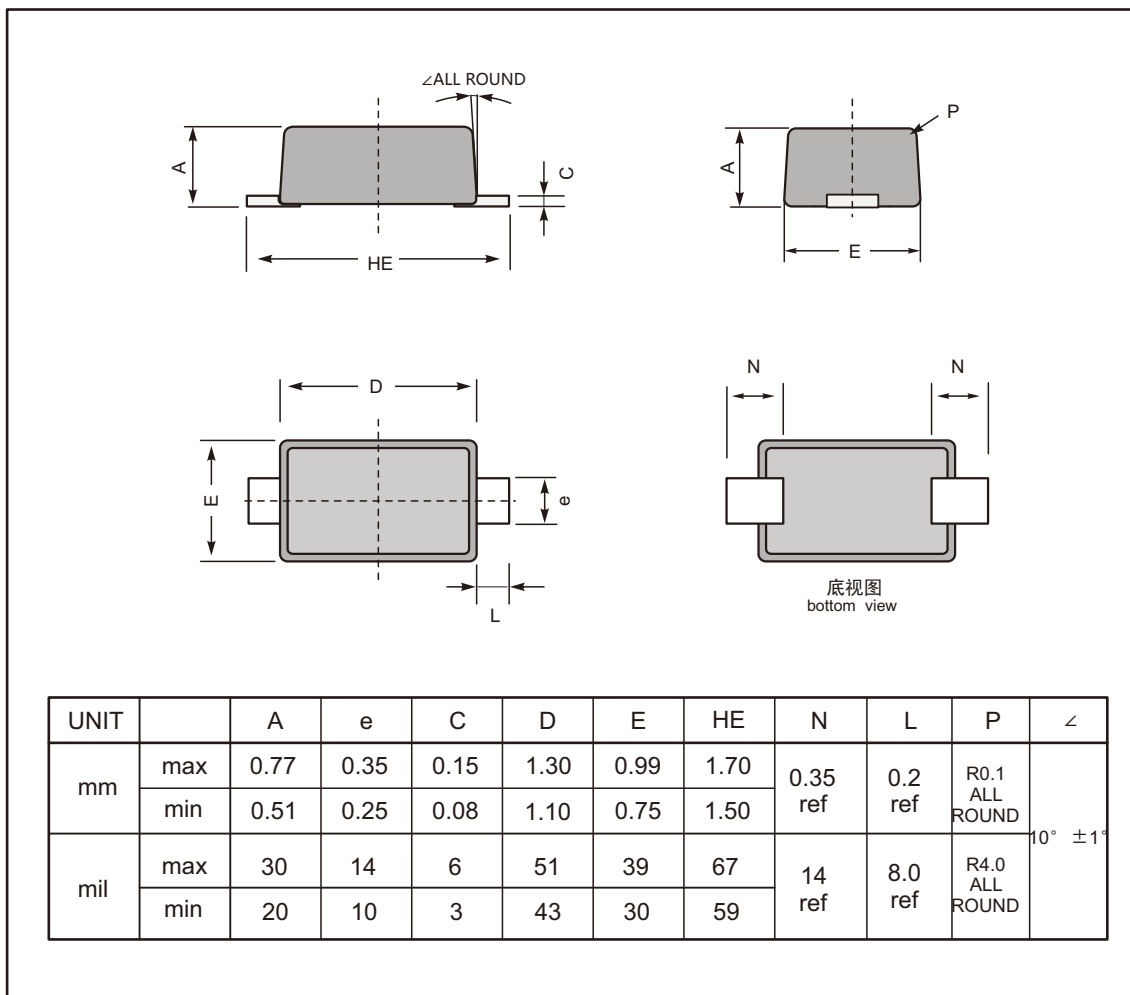




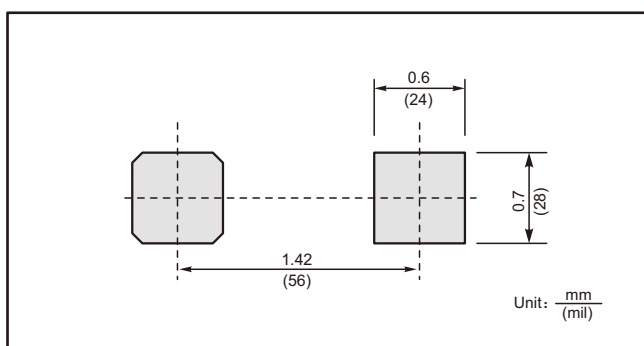
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



The recommended mounting pad size



Marking

| Type number | Marking code |
|-------------|--------------|
| 1N4148JGT | T4 |



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