

SDB310Q

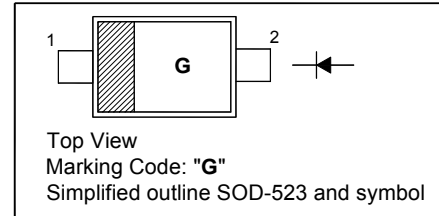
SCHOTTKY BARRIER DIODE

Features

- Low power rectified
- Silicon epitaxial type
- High reliability

PINNING

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

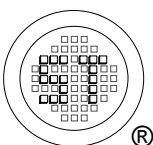


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

| Parameter | Symbol | Value | Unit |
|---|-----------|---------------|------------------|
| Reverse Voltage | V_R | 30 | V |
| Forward Current | I_F | 0.2 | A |
| Repetitive Peak Forward Current | I_{FRM} | 0.5 | A |
| Non-Repetitive Peak Forward Current (10 ms) | I_{FSM} | 2 | A |
| Power Dissipation | P_D | 150 | mW |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 55 to + 150 | $^\circ\text{C}$ |

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

| Parameter | Symbol | Max. | Unit |
|---|----------|------------|---------------|
| Forward Voltage at $I_F = 10\text{ mA}$ at $I_F = 30\text{ mA}$ | V_F | 0.4 0.5 | V |
| Reverse Current at $V_R = 30\text{ V}$ | I_R | 1 | μA |
| Total Capacitance at $V_R = 1\text{ V}$, $f = 1\text{ MHz}$ | C_T | 10 | pF |
| Reverse Recovery Time at $I_F = I_R = 10\text{ mA}$, $I_{RR} = 1\text{ mA}$, $R_L = 100\ \Omega$ | t_{rr} | 5 | ns |



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Fig. 1 $I_F - V_F$

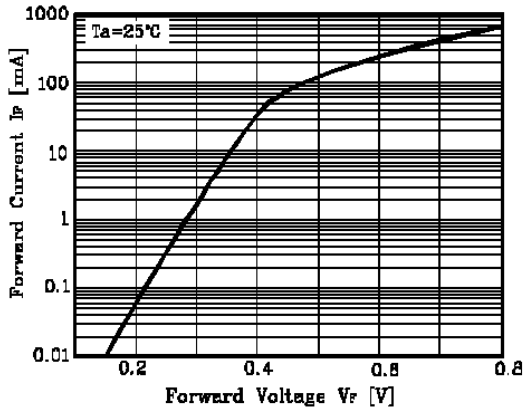


Fig. 2 $I_R - V_R$

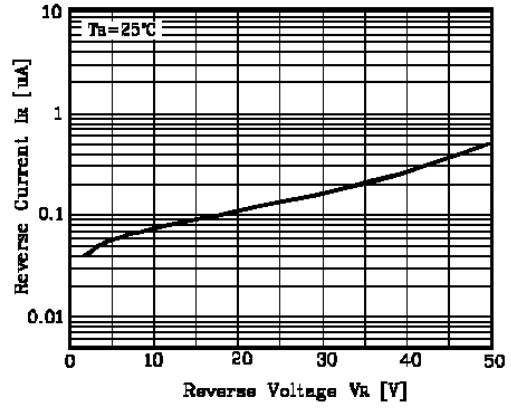
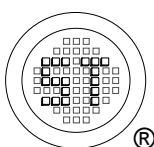
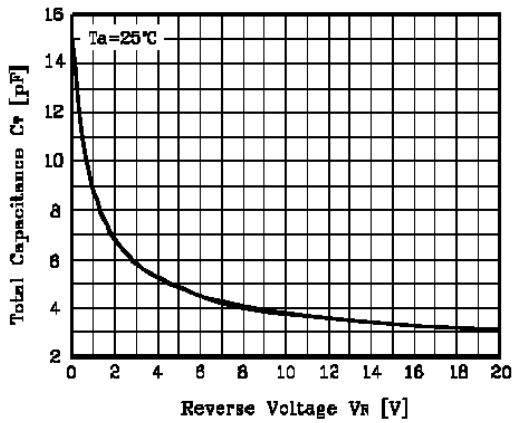


Fig. 3 $C_T - V_R$



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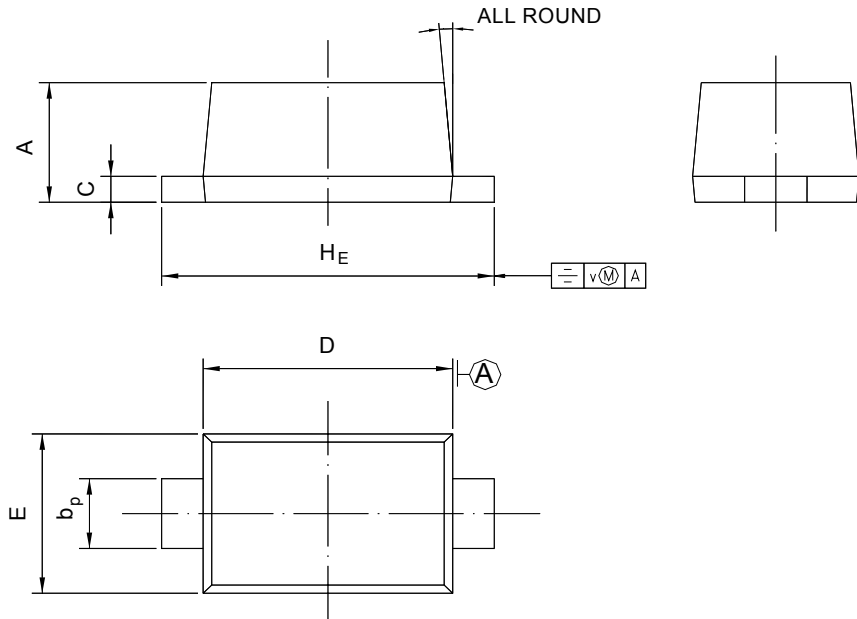


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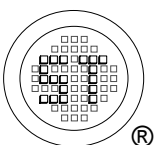
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



| UNIT | A | b _p | C | D | E | H _E | V | |
|------|--------------|----------------|----------------|--------------|--------------|----------------|-----|----|
| mm | 0.70 0.60 | 0.4 0.3 | 0.135 0.100 | 1.25 1.15 | 0.85 0.75 | 1.7 1.5 | 0.1 | 5° |



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