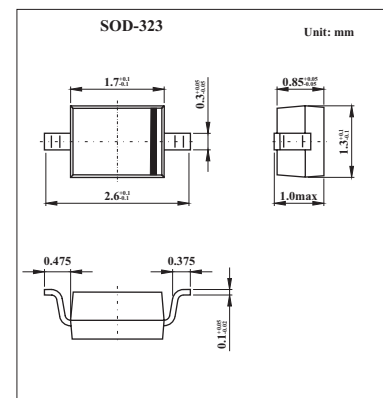


Silicon PIN Diode

BA597

■ Features

- RF switch, RF attenuator for frequencies above 10 MHz
- Very low IM distortion

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

| Parameter | Symbol | Value | Unit |
|--|-----------|-------------|------------------|
| Reverse voltage | V_R | 50 | V |
| Forward current | I_F | 100 | mA |
| Total power dissipation $T_s \leq 40^\circ\text{C}^{1)}$ | T_{tot} | 250 | mW |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature range | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

Note:

1. Package mounted on aluminum $15\text{ mm} \times 16.7\text{ mm} \times 0.7\text{ mm}$.

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

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------|----------|--|-----|------|-----|----------------|
| Reverse current | I_R | $V_R = 30\text{ V}$ | | | 20 | nA |
| Forward voltage | V_F | $I_F = 100\text{ mA}$ | | 0.9 | | V |
| Diode capacitance | C_T | $V_R = 10\text{ V}, f = 1\text{ MHz}$ | | 0.52 | | pF |
| | | $V_R = 0\text{ V}, f = 100\text{ MHz}$ | | 0.27 | | |
| Forward resistance | r_f | $I_F = 1.5\text{ mA}, f = 100\text{ MHz}$ | | 22 | | Ω |
| | | $I_F = 10\text{ mA}, f = 100\text{ MHz}$ | | 4.2 | | |
| Charge carrier lifetime | τ_L | $I_F = 10\text{ mA}, I_R = 6\text{ mA}, I_R = 3\text{ mA}$ | | 2.5 | | $\mu\text{ S}$ |

■ Marking

| | |
|---------|----------|
| Marking | yellow R |
|---------|----------|