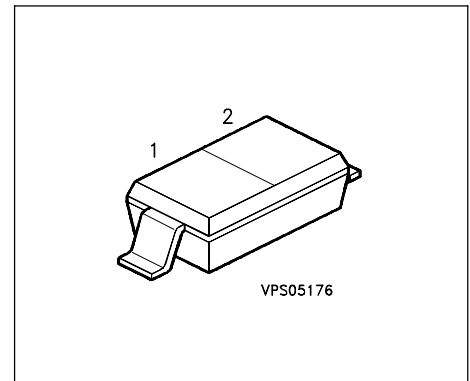


Silicon Schottky Diode

- DBS mixer application to 12GHz
- Medium barrier type
- Low capacitance



ESD: ElectroStatic Discharge sensitive device, observe handling precautions!

| Type | Marking | Ordering Code | Pin Configuration | | | Package |
|------------|---------|---------------|-------------------|-------|--|---------|
| BAT 14-03W | O/white | Q62702-A1103 | 1 = A | 2 = C | | SOD-323 |

Maximum Ratings

| Parameter | Symbol | Values | Unit |
|---|-----------|----------------|------|
| Diode reverse voltage | V_R | 4 | V |
| Forward current | I_F | 90 | mA |
| Operating temperature range | T_{op} | - 55 ... + 125 | °C |
| Storage temperature | T_{stg} | - 55 ... + 150 | |
| Total power dissipation $T_S \leq 85^\circ\text{C}$ | P_{tot} | 100 | mW |

Thermal Resistance

| | | | |
|--------------------------------|------------|------------|-----|
| Junction ambient ¹⁾ | R_{thJA} | ≤ 450 | K/W |
| Junction - soldering point | R_{thJS} | ≤ 690 | |

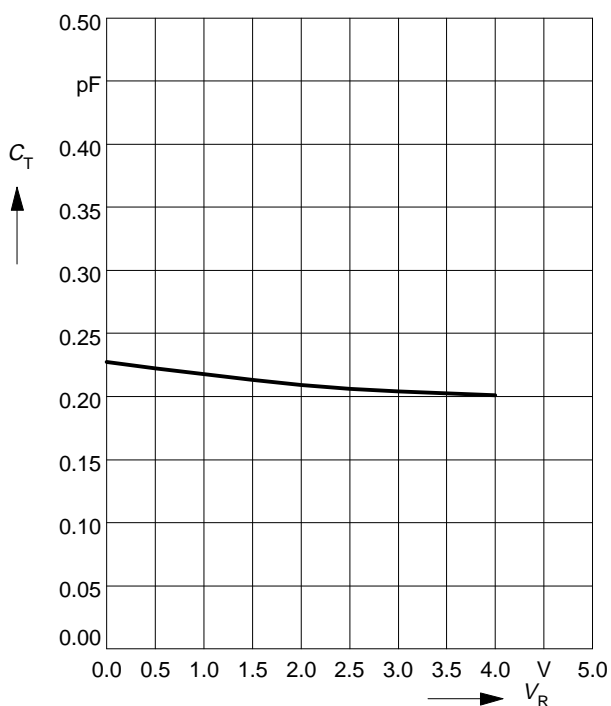
1) Package mounted on epoxy pcb 40mm x 40mm x 1.5mm / 0.5cm² Cu

Electrical Characteristics at $T_A=25^\circ\text{C}$, unless otherwise specified

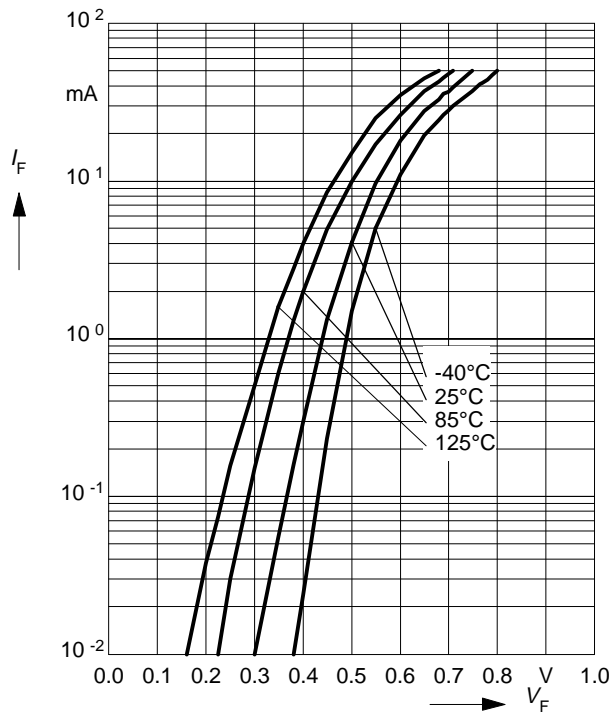
| Parameter | Symbol | Values | | | Unit |
|---|------------|--------|------|------|----------|
| | | min. | typ. | max. | |
| DC characteristics | | | | | |
| Breakdown voltage $I_{(BR)} = 5 \mu\text{A}$ | $V_{(BR)}$ | 4 | - | - | V |
| Forward voltage $I_F = 1 \text{ mA}$ | V_F | 0.36 | 0.43 | 0.52 | |
| $I_F = 10 \text{ mA}$ | | 0.48 | 0.55 | 0.66 | |
| Diode capacitance $V_R = 0, f = 1 \text{ MHz}$ | C_T | - | 0.22 | 0.35 | pF |
| Differential forward resistance $I_F 10\text{mA}/ 50 \text{ mA}$ | R_F | - | 5.5 | - | Ω |

Diode capacitance $C_T = f(V_R)$

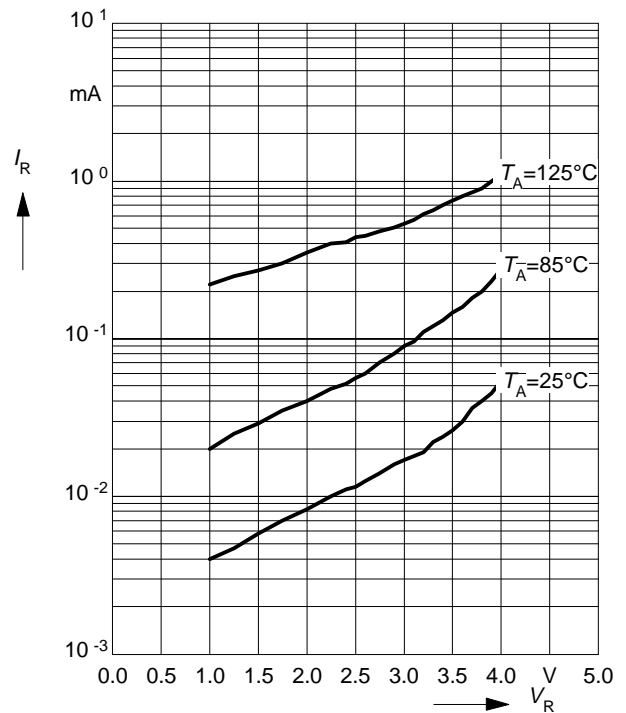
$f = 1\text{MHz}$



Forward current $I_F = f(V_F)$



Reverse current $I_R = f(V_R)$



Package

