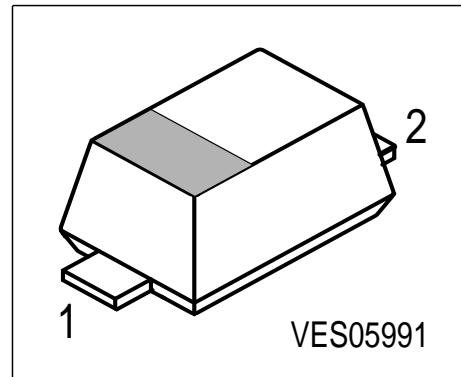


Silicon RF Switching Diode**Preliminary data**

- Low loss, low capacitance PIN-diode
- Band switch for TV-tuners
- Series diode for mobile communication transmit-receiver switch



| Type | Marking | Ordering Code | Pin Configuration | | Package |
|------------|---------|---------------|-------------------|-------|---------|
| BAR 65-02W | N | Q62702-A1216 | 1 = C | 2 = A | SCD-80 |

Maximum Ratings

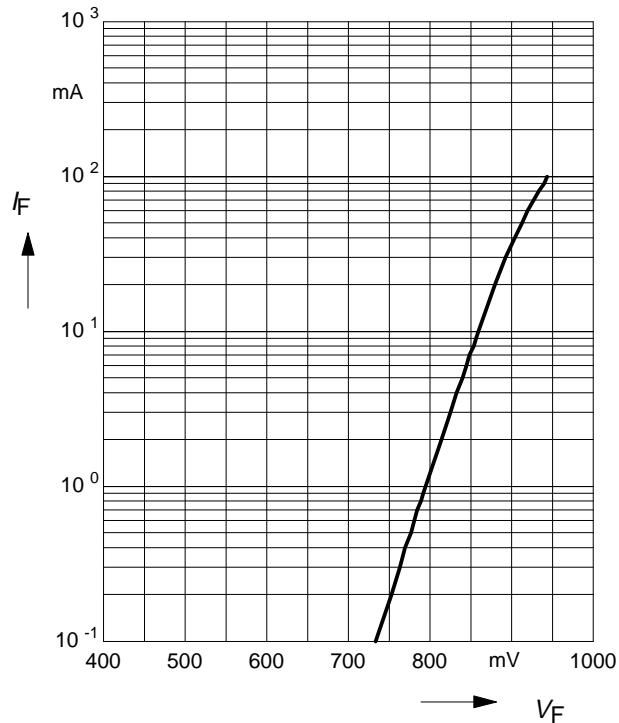
| Parameter | Symbol | Value | Unit |
|-----------------------------|-----------|---------------|------|
| Diode reverse voltage | V_R | 30 | V |
| Forward current | I_F | 100 | mA |
| Operating temperature range | T_{op} | - 55 ... +125 | °C |
| Storage temperature | T_{stg} | - 55 ... +150 | |

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

| Parameter | Symbol | Values | | | Unit |
|---|---------------|---------------|--------------|-------------|-------------|
| | | min. | typ. | max. | |
| DC characteristics | | | | | |
| Reverse current $V_R = 20 \text{ V}$ | I_R | - | - | 20 | nA |
| Forward voltage $I_F = 100 \text{ mA}$ | V_F | - | 0.93 | 1 | V |
| AC characteristics | | | | | |
| Diode capacitance $V_R = 1 \text{ V}, f = 1 \text{ MHz}$ $V_R = 3 \text{ V}, f = 1 \text{ MHz}$ | C_T | - | 0.6 0.57 | 0.9 0.8 | pF |
| Forward resistance $I_F = 5 \text{ mA}, f = 100 \text{ MHz}$ $I_F = 10 \text{ mA}, f = 100 \text{ MHz}$ | r_f | - | 0.65 0.56 | 0.95 0.9 | Ω |
| Series inductance | L_s | - | 0.6 | - | nH |

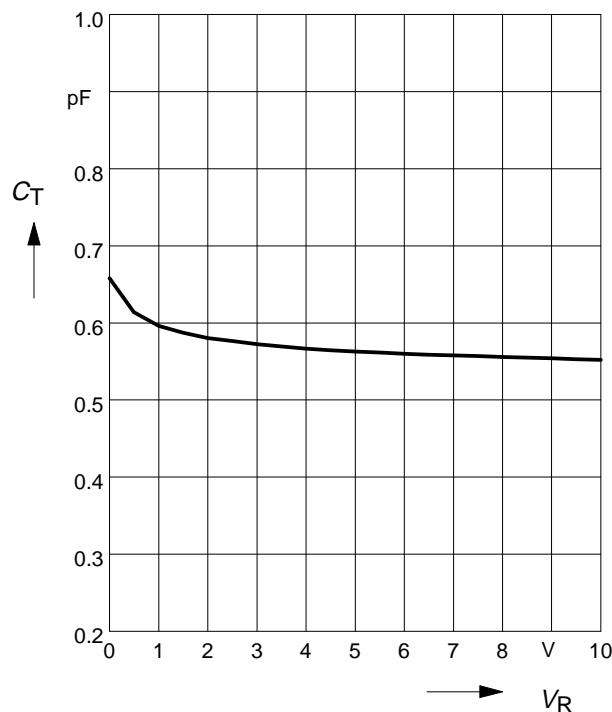
Forward current $I_F = f(V_F)$

$T_A = 25^\circ\text{C}$



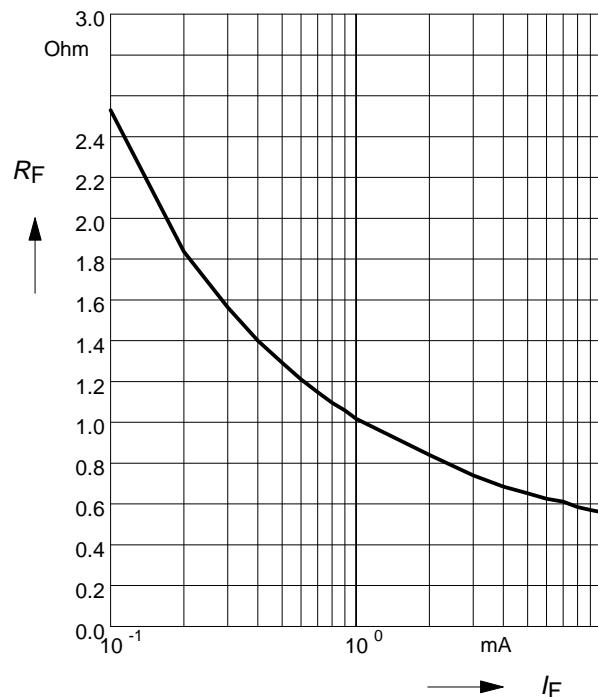
Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$



Forward resistance $r_f = f(I_F)$

$f = 100\text{MHz}$



Diode capacitance $C_T = f(V_R)$

$f = 100\text{MHz}$

