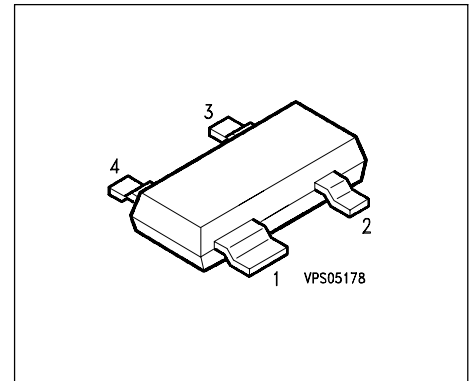


Silicon RF Switching Diode

Preliminary data

- Low loss, low capacitance PIN-Diode
- Band switch for TV-tuners
- Series diode for mobile communications transmit-receive switch
- Unconnected pair



Type	Marking	Ordering Code	Pin Configuration				Package
BAR 65-07	M	UPON INQUIRY	1 = C1	2 = C2	3 = A2	4 = A1	SOT-143

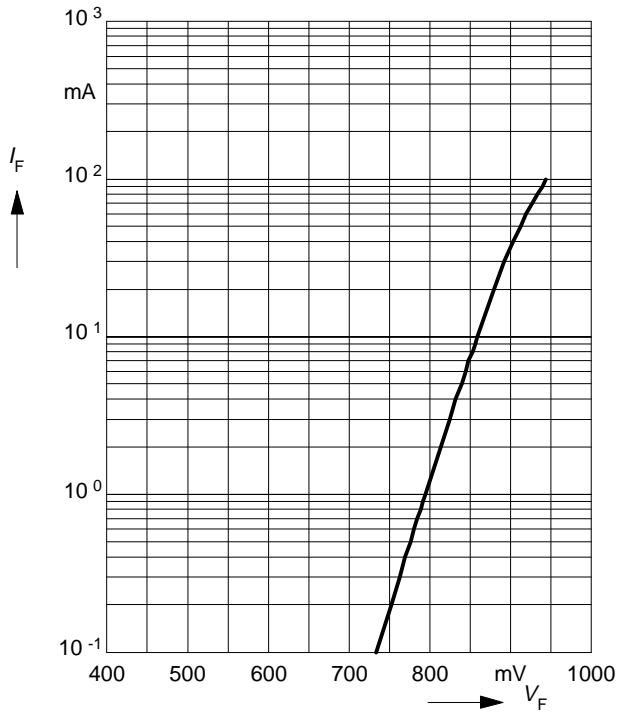
Maximum Ratings

Parameter	Symbol	Values	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

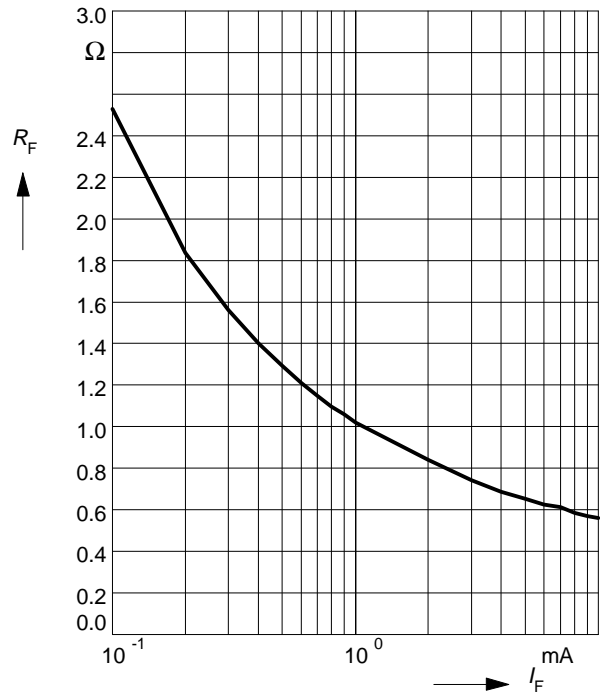
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current $V_R = 20 \text{ V}, T_A = 25^\circ\text{C}$	I_R	-	-	20	nA
Forward voltage $I_F = 100 \text{ mA}$	V_F	-	0.93	1	V
AC characteristics					
Diode capacitance $V_R = 1 \text{ V}, f = 1 \text{ MHz}$ $V_R = 3 \text{ V}, f = 1 \text{ MHz}$	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	-	1.4	-	nH

Forward current $I_F = f(V_F)$



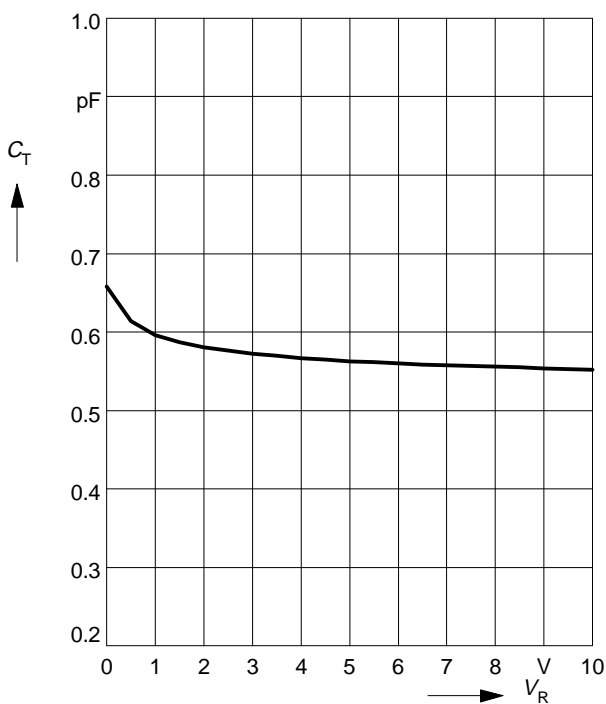
Forward resistance $r_f = f(I_F)$

$f = 100\text{MHz}$



Diode capacitance $C_T = f(V_R)$

$f = 1\text{MHz}$



Diode capacitance $C_T = f(V_R)$

$f = 100\text{MHz}$

