

Silicon PIN diode

Features

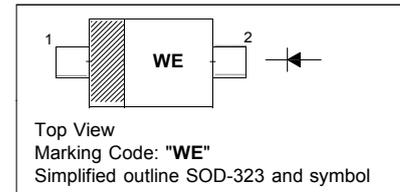
- Low forward resistance
- Low capacitance

Applications

- Current-controlled RF resistor for switching and attenuating applications

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



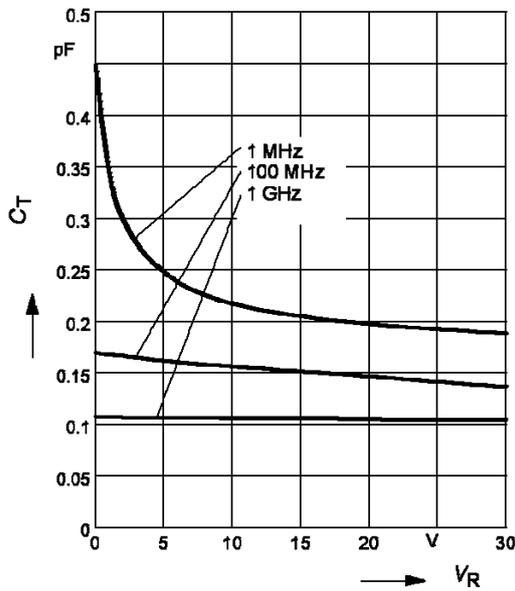
Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	50	V
Continuous Forward Current	I_F	50	mA
Junction Temperature	T_j	150	$^\circ\text{C}$
Operating Temperature Range	T_{opr}	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

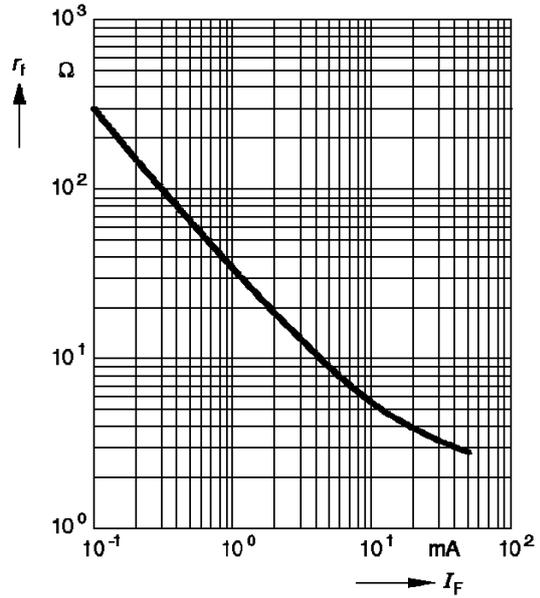
Electrical Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 50\text{ mA}$	V_F	-	1.1	V
Reverse Current at $V_R = 30\text{ V}$	I_R	-	20	nA
Reverse Voltage at $I_R = 10\text{ }\mu\text{A}$	V_R	50	-	V
Diode Capacitance at $V_R = 0\text{ V}$, $f = 100\text{ MHz}$ at $V_R = 10\text{ V}$, $f = 1\text{ MHz}$	C_d	- -	0.4 0.6	pF
Forward Resistance at $I_F = 1.5\text{ mA}$, $f = 100\text{ MHz}$ at $I_F = 10\text{ mA}$, $f = 100\text{ MHz}$	r_f	- -	40 7	Ω

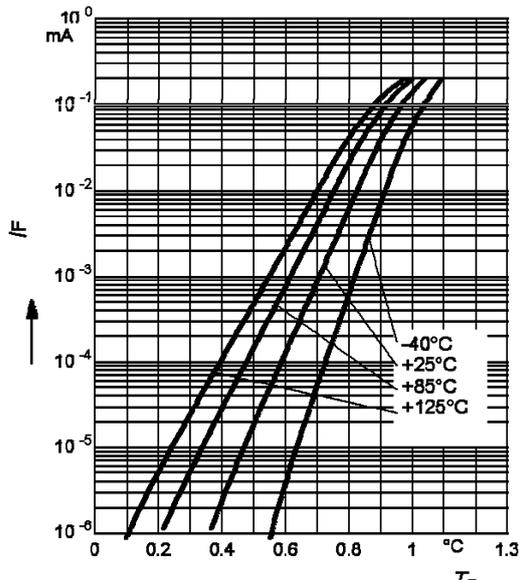
Diode capacitance $C_T = f(V_R)$



Forward resistance $r_f = f(I_F)$



Forward current $I_F = f(V_F)$



Forward current $I_F = f(T_S)$

