

## Silicon PIN diode

### Features

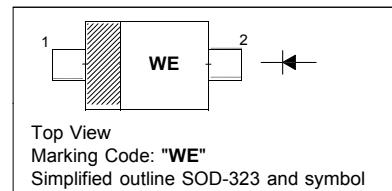
- Low forward resistance
- Low capacitance

### Applications

- Current-controlled RF resistor for switching and attenuating applications

#### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

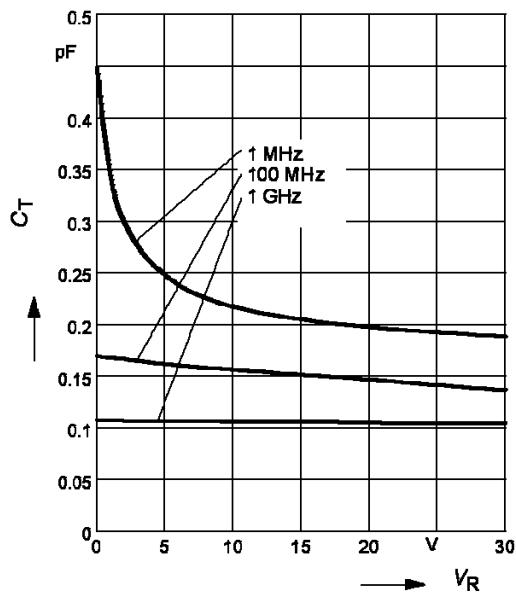
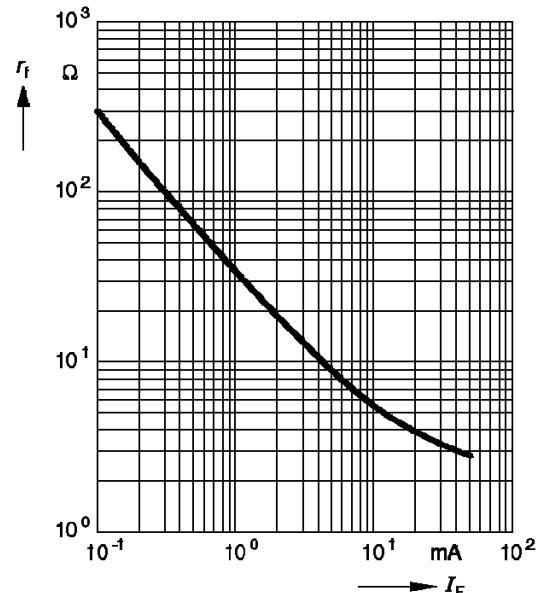
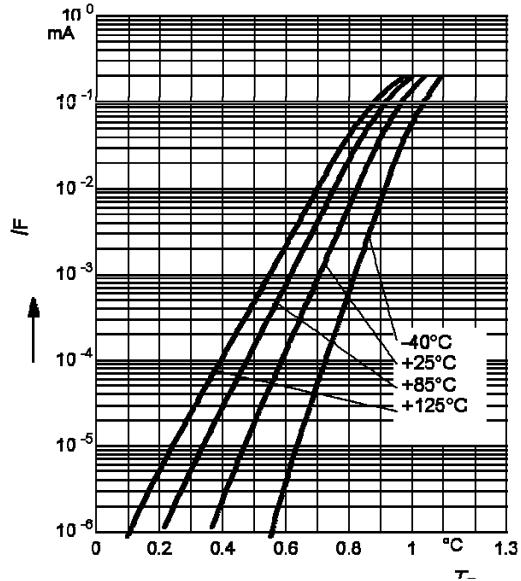


### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

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

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 $I_R = 10 \mu\text{A}$	$V_R$	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	$\Omega$

**Diode capacitance  $C_T = f(V_R)$** 

**Forward resistance  $r_f = f(I_F)$** 

**Forward current  $I_F = f(V_F)$** 

**Forward current  $I_F = f(T_S)$** 
