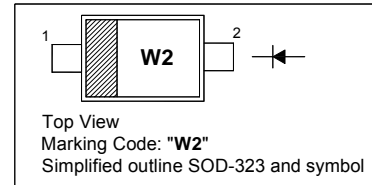


# 1N914WS

## Silicon Epitaxial Planar Switching Diode

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

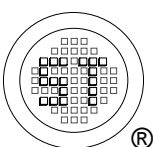


### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Repetitive Reverse Voltage	$V_{RRM}$	100	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM}$	0.5 1	A
			at $t = 1\text{ s}$ at $t = 1\ \mu\text{s}$
Power Dissipation	$P_{tot}$	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

### Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$	$V_F$	-	1	V
Reverse Breakdown Voltage at $I_R = 5\ \mu\text{A}$ at $I_R = 100\ \mu\text{A}$	$V_{(BR)R}$ $V_{(BR)R}$	75 100	- -	V V
Reverse Current at $V_R = 20\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 20\text{ V}, T_J = 150^\circ\text{C}$	$I_R$	- - -	25 5 50	nA $\mu\text{A}$ $\mu\text{A}$
Total Capacitance at $V_R = 0\text{ V}, f = 1\text{ MHz}$	$C_{tot}$	-	4	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}, R_L = 100\ \Omega, I_{RR} = 3\text{ mA}$	$t_{rr}$	-	50	ns

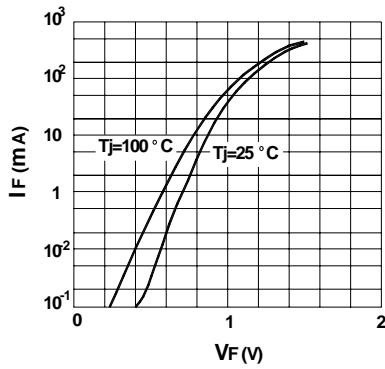


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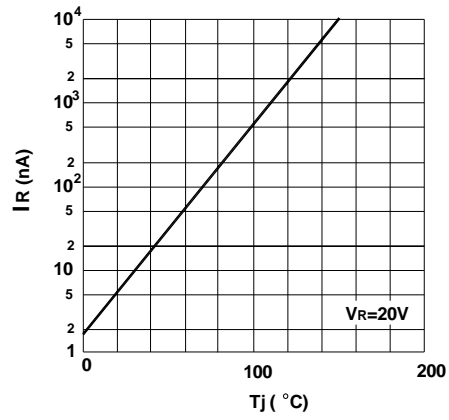


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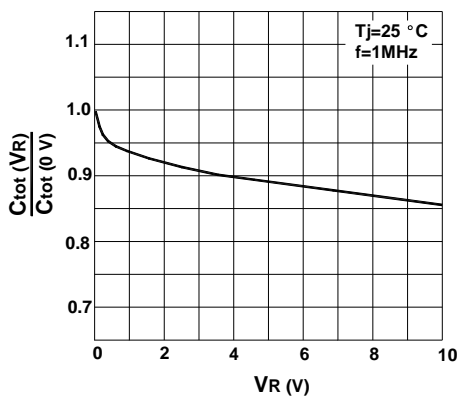
Forward characteristics



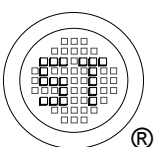
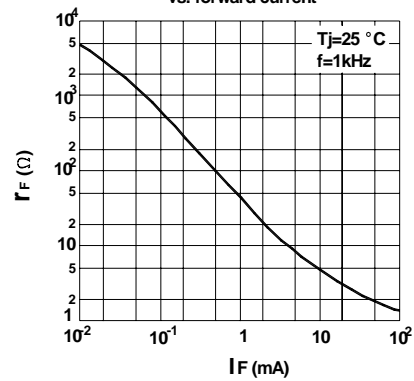
Leakage current vs. junction temperature



Reverse capacitance vs. reverse voltage



Dynamic forward resistance vs. forward current



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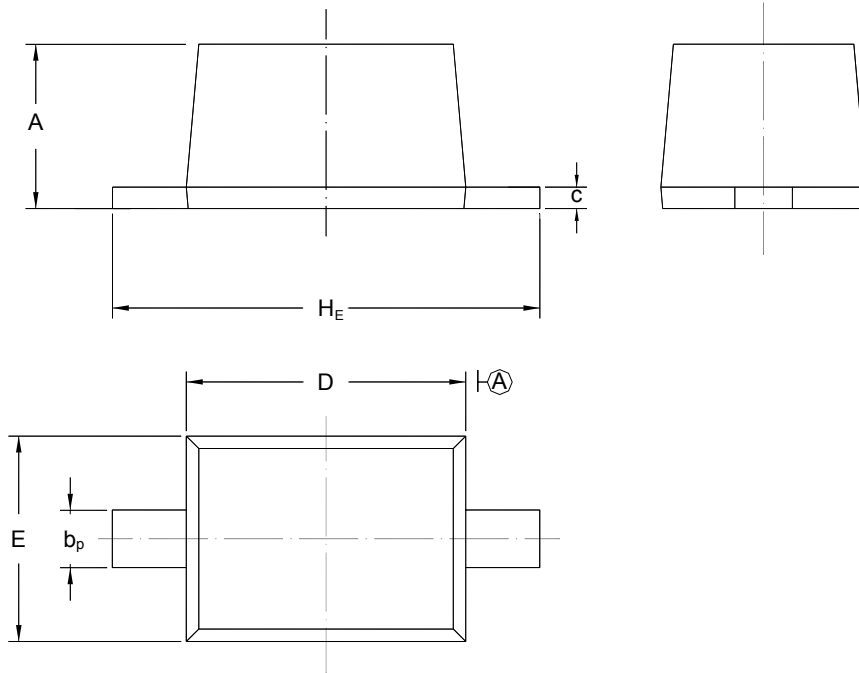


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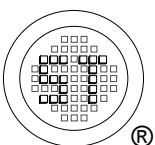
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	$b_p$	C	D	E	$H_E$
mm	1.10 0.80	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30



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