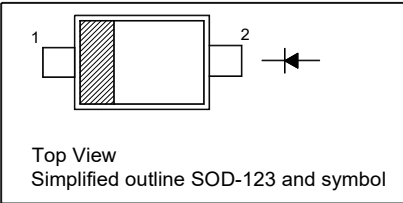


# 1N914W

## Silicon Epitaxial Planar Switching Diode

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



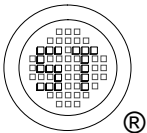
### Absolute Maximum Ratings ( $T_a = 25^{\circ}\text{C}$ )

Parameter	Symbol	Value	Unit
Repetitive Reverse Voltage	$V_{RRM}$	100	V
Average Rectified Forward Current	$I_{F(AV)}$	215	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM}$	1 2	A
Power Dissipation	$P_D$	400	mW
Junction Temperature	$T_j$	150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^{\circ}\text{C}$

### Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction to Ambient <sup>1)</sup>	$R_{\theta JA}$	313	$^{\circ}\text{C/W}$

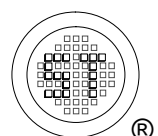
<sup>1)</sup> Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.



# 1N914W

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

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 5 \mu\text{A}$ at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	75 100	- -	V
Forward Voltage at $I_F = 10 \text{ mA}$	$V_F$	-	1	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 $\mu\text{A}$ $\mu\text{A}$
Capacitance at $V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$	$C_{\text{tot}}$	-	4	pF
Reverse Recovery Time at $I_F = 10 \text{ mA}$ , $V_R = 6 \text{ V}$ , $I_{rr} = 0.1 \times I_R$ , $R_L = 100 \Omega$	$t_{rr}$	-	4	ns



Electrical Characteristics Curves

Fig 1. Power Derating Curve

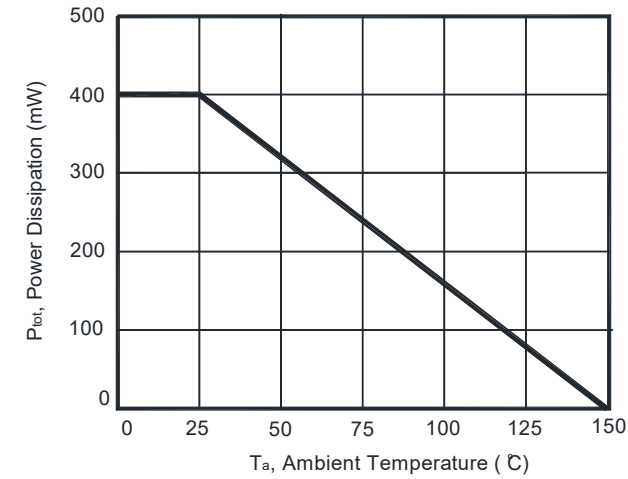


Fig 2. Capacitance Characteristics

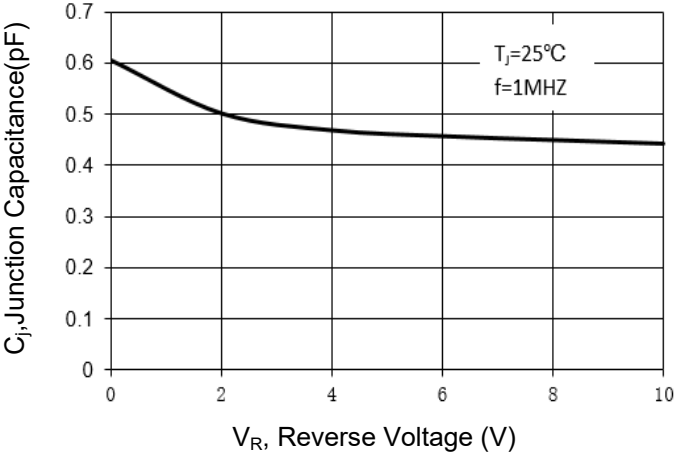


Fig 3. Reverse Characteristics

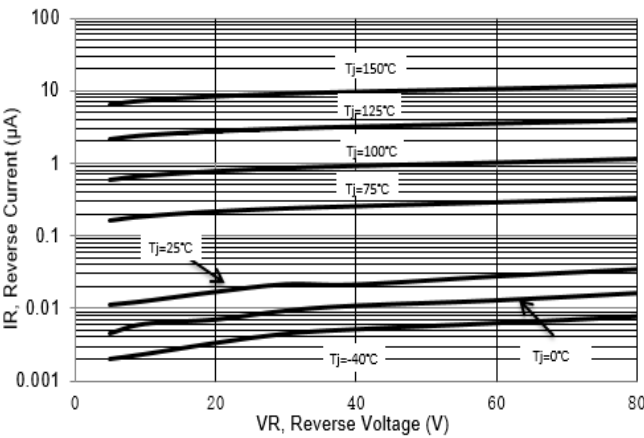
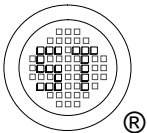
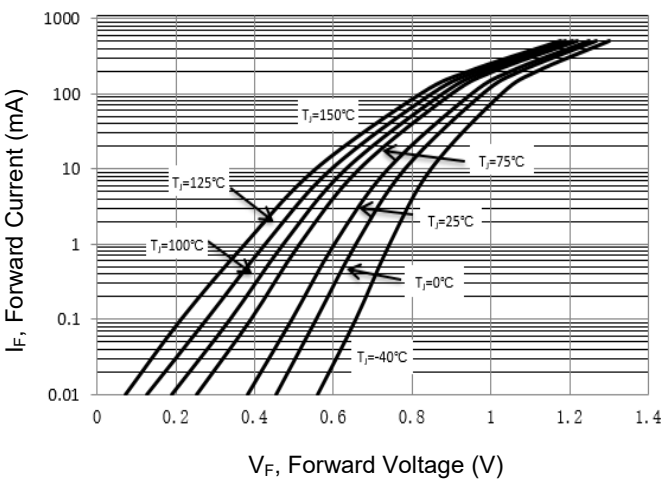


Fig 4. Forward Characteristics

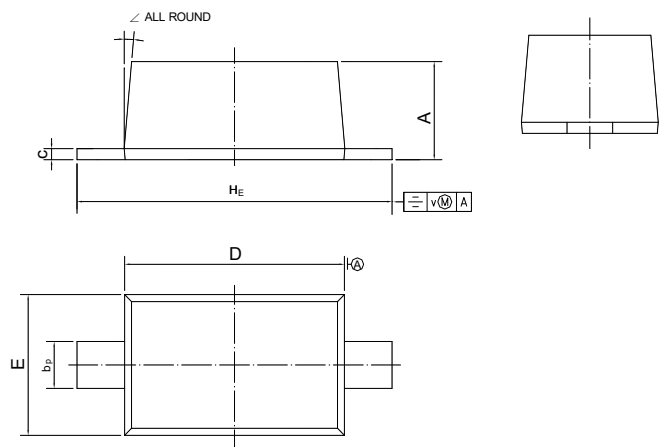


# 1N914W

## PACKAGE OUTLINE

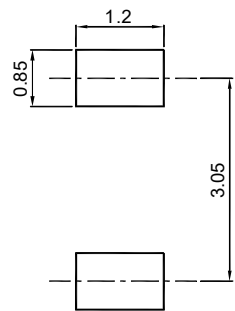
Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b <sub>p</sub>	c	D	E	H <sub>E</sub>	v	∠
mm	1.15 1.05	0.6 0.5	0.135 0.100	2.7 2.6	1.65 1.55	3.85 3.55	0.2	5°

### Recommended Soldering Footprint



### Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	(inch)	mm	(inch)	
SOD-123	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

### Marking information

" W1 " = Part No.  
" III " = Cathode line  
Font type: Arial



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