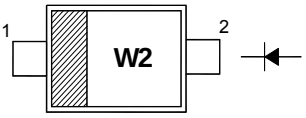
1N914WS-AH

Silicon Epitaxial Planar Switching Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "**W2**"
Simplified outline SC-76 and symbol

Features

- Small plastic package suitable for surface mounted design
- High reliability
- AEC-Q101 is Available
- Halogen and Antimony Free(HAF), RoHS compliant

Applications

- High speed switching

Absolute Maximum Ratings (T_a = 25 °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	at t = 1 s at t = 1 µs	I_{FSM}	0.5 1	A
Power Dissipation		P_{tot}	200	mW
Thermal Resistance Junction to Ambient		$R_{\theta JA}$	625	°C/W
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	- 55 to + 150	°C

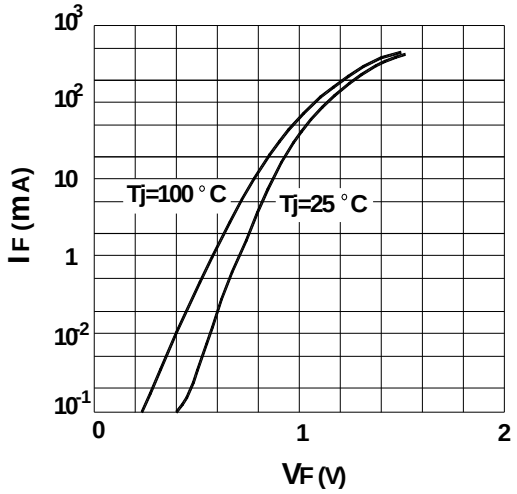
Electrical Characteristics (T_a = 25 °C)

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at I_F = 10 mA	V_F	-	1	V
Reverse Breakdown Voltage at I_R = 5 µA at I_R = 100 µA	 $V_{(BR)R}$ $V_{(BR)R}$	 75 100	 - -	 V V
Reverse Current at V_R = 20 V at V_R = 75 V at V_R = 20 V, T_J = 150 °C	I_R	 - - -	 25 5 50	 nA µA µA
Total Capacitance at V_R = 0 V, f = 1 MHz	C_{tot}	-	4	pF
Reverse Recovery Time at I_F = 10 mA, V_R = 6 V, R_L = 100 Ω, I_{rr} = 0.1 × I_R	t_{rr}	-	50	ns

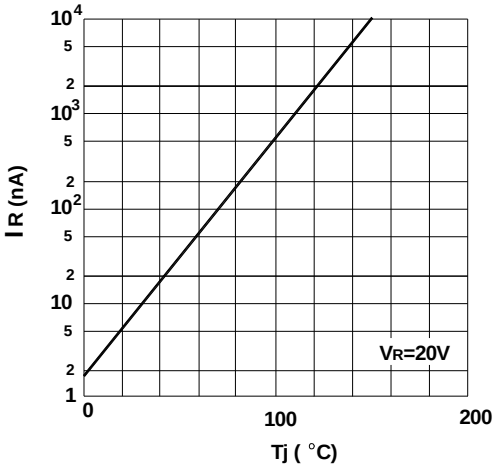
Dated: 08/01/2020 SLB3 Rev: 01

Ratings and Electrical Characteristics Curves

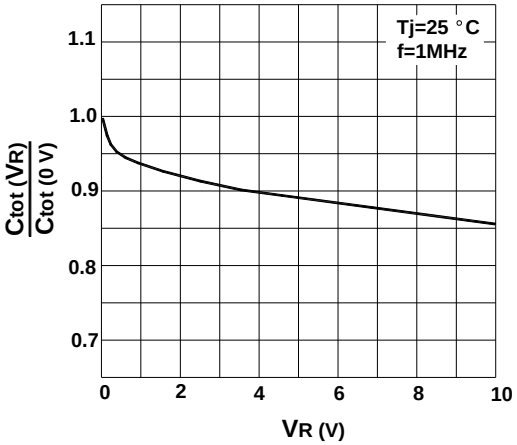
Forward characteristics



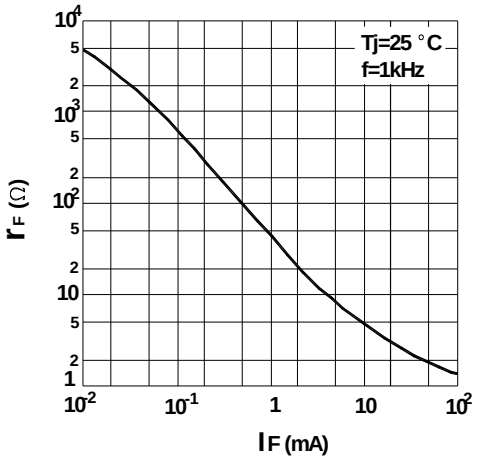
Leakage current vs. junction temperature



Reverse capacitance vs. reverse voltage

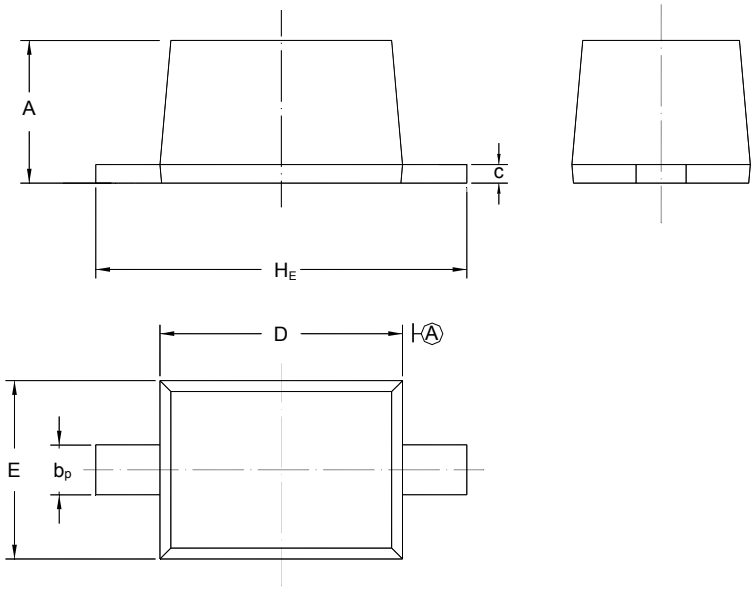


Dynamic forward resistance vs. forward current



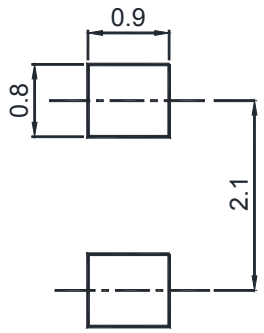
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads SC-76



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

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SC-76	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" III " = Cathode line
" • " = HAF (Halogen and Antimony Free)
" W2 " = Part No.
Font type: Arial