

# MSKSEMI

SEMICONDUCTOR



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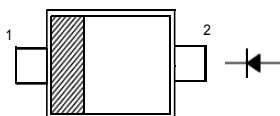
PLED

Product data sheet

## Surface Mount Schottky Barrier Diodes

### Features

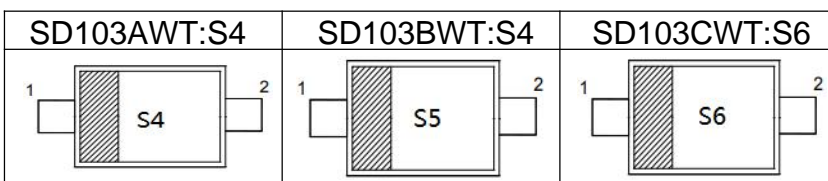
- Low Forward Voltage



### MARK:

#### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



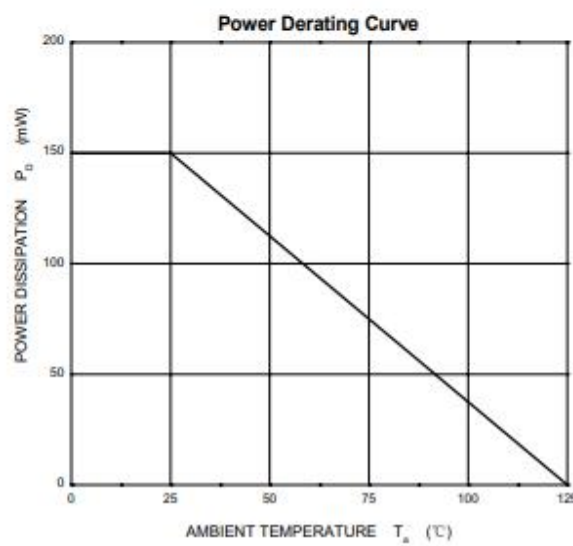
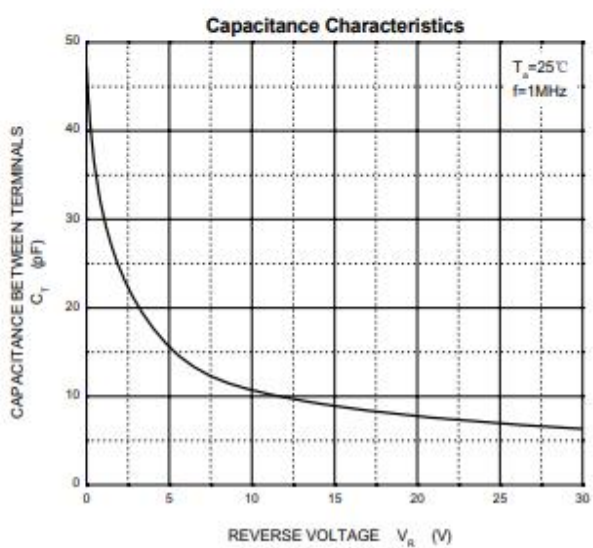
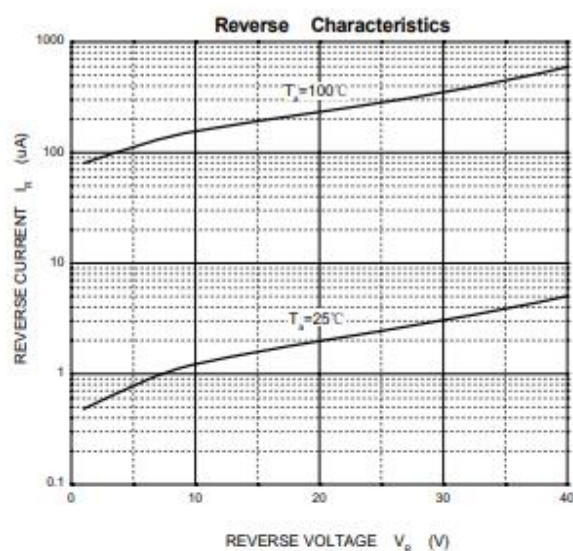
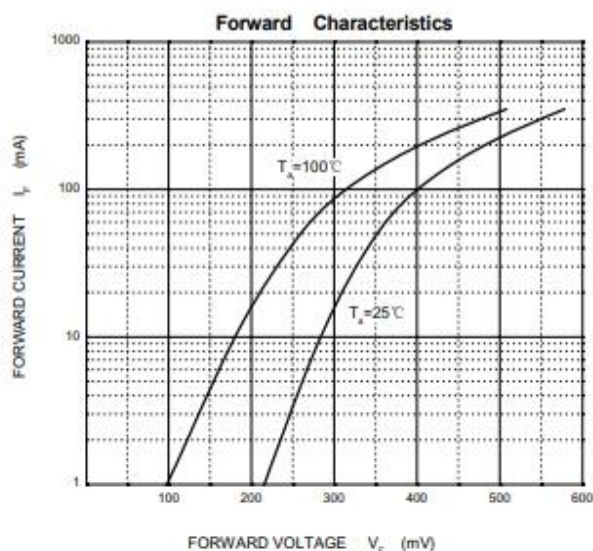
### Absolute Maximum Ratings ( $T_a = 25\text{ }^{\circ}\text{C}$ )

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	SD103AWT SD103BWT SD103CWT	$V_{RRM}$ 40 30 20	V
Reverse Voltage	SD103AWT SD103BWT SD103CWT	$V_R$ 40 30 20	V
Average Forward Rectified Current	$I_{F(AV)}$	350	mA
Non-Repetitive Peak Forward Surge Current at $t = 1\text{ s}$	$I_{FSM}$	2	A
Power Dissipation	$P_{tot}$	200	mW
Operating and Storage Temperature Range	$T_j, T_{stg}$	- 65 to + 125	$^{\circ}\text{C}$

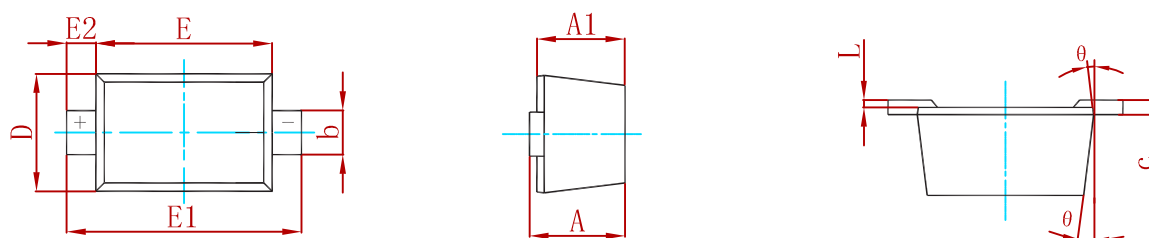
### Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 10\mu\text{A}$	SD103AWT SD103BWT SD103CWT	$V_{(BR)R}$ 40 30 20	- - -	- - -	V
Reverse Leakage Current at $V_R = 30\text{ V}$ at $V_R = 20\text{ V}$ at $V_R = 10\text{ V}$	SD103AWT SD103BWT SD103CWT	$I_R$ - - -	- - -	5 5 5	$\mu\text{A}$
Forward Voltage at $I_F = 20\text{ mA}$ at $I_F = 200\text{ mA}$	$V_F$	- -	- -	0.37 0.6	V
Total Capacitance at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$	$C_T$	-	50	-	pF
Reverse Recovery Time at $I_F = I_R = 200\text{ mA}$ , $I_{rr} = 0.1 I_R$ , $R_L = 100\text{ }\Omega$	$t_{rr}$	-	10	-	ns

## Typical Characteristics

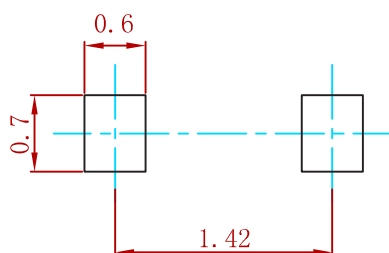


## PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

## Suggested Pad Layout



### Note:

1. Controlling dimension: In millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.

## REEL SPECIFICATION

P/N	PKG	QTY
SD103AWT/SD103BWT/SD103CWT	SOD-523	3000

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