

MSKSEMI

SEMICONDUCTOR



ESD



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TSS



MOV



GDT



PLED

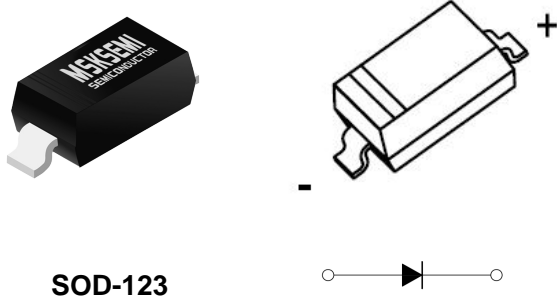
Product data sheet


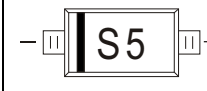
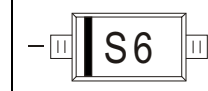
Schottky Barrier Diode

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Capacitance

MARKING:



SD103AW:S4	SD103BW:S5	SD103CW:S6
		

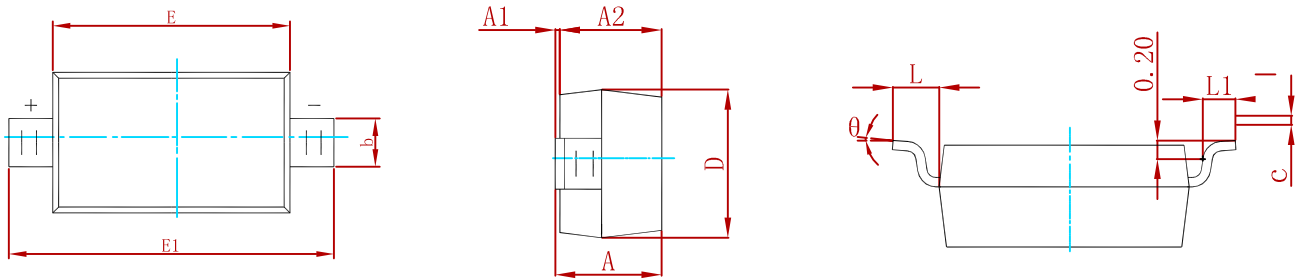
MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value			Unit
		SD103AW	SD103BW	SD103CW	
V _{RRM}	Peak Repetitive Reverse Voltage	40	30	20	V
V _{RWM}	Working Peak Reverse Voltage				
V _{R(RMS)}	RMS Reverse Voltage	28	21	14	V
I _{FM}	Forward Continuous Current	350			mA
I _{FSM}	Non-repetitive Peak Forward Surge Current@t=8.3ms	2			A
P _D	Power Dissipation	400			mW
R _{θJA}	Thermal Resistance from Junction to Ambient	250			°C/W
T _j	Junction Temperature	125			°C
T _{stg}	Storage Temperature	-55~+150			°C

ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise specified)

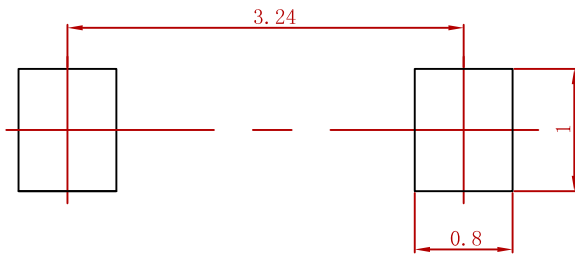
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V _(BR)	I _R =100μA SD103AW	40			V
		SD103BW	30			
		SD103CW	20			
Reverse current	I _R	V _R =30V SD103AW			5	μA
		V _R =20V SD103BW				
		V _R =10V SD103CW				
Forward voltage	V _F	I _F =20mA			0.37	V
		I _F =200mA			0.6	
Total capacitance	C _{tot}	V _R =0V, f=1MHz		50		pF
Reverse recovery time	t _{rr}	I _F = I _R =200mA, I _{rr} =0.1×I _R , R _L =100Ω		10		ns

PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05mm.
3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
SD103AW-SD103CW	SOD-123	3000

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