

RoHS Compliant Product  
 A suffix of "-C" specifies halogen & lead-free

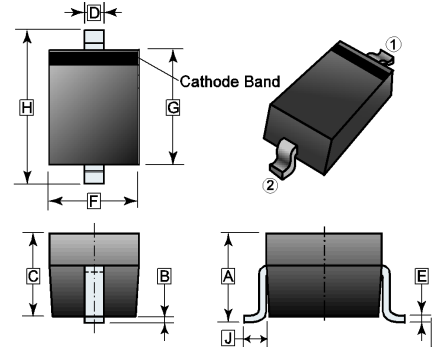
**FEATURES**

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

**MARKING**

Part Number	Marking
SD103AWS	S4
SD103BWS	S5
SD103CWS	S6

**SOD-323**



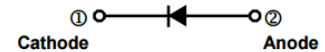
**PACKAGE INFORMATION**

Package	MPQ	Leader Size
SOD-323	3K	7 inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.05 REF.		F	1.15	1.45
B	0.20 REF.		G	1.6	1.9
C	0.80	1.00	H	2.30	2.75
D	0.25	0.40	J	0.475 REF.	
E	0.080	0.20			

**ORDER INFORMATION**

Part Number	Type
SD103AWS~SD103CWS	Lead (Pb)-free
SD103AWS-C~SD103CWS-C	Lead (Pb)-free and Halogen-free



**ABSOLUTE MAXIMUM RATINGS** (T<sub>A</sub>=25°C unless otherwise noted)

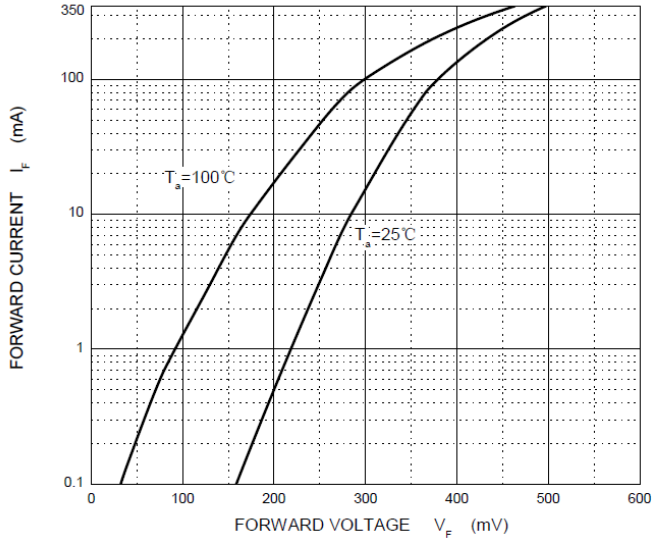
Parameter	Symbol	Part Number			Unit
		SD103CWS	SD103BWS	SD103AWS	
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	20	30	40	
Maximum DC Blocking Voltage	V <sub>R</sub>	20	30	40	
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	21	28	
Average Rectified Output Current	I <sub>FM</sub>	350			mA
Peak Forward Surge Current @8.3ms Single Half Sine-Wave	I <sub>FSM</sub>	2			A
Power Dissipation	P <sub>D</sub>	200			mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	500			°C / W
Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	125,-55~150			°C

**ELECTRICAL CHARACTERISTICS** (T<sub>A</sub>=25°C unless otherwise noted)

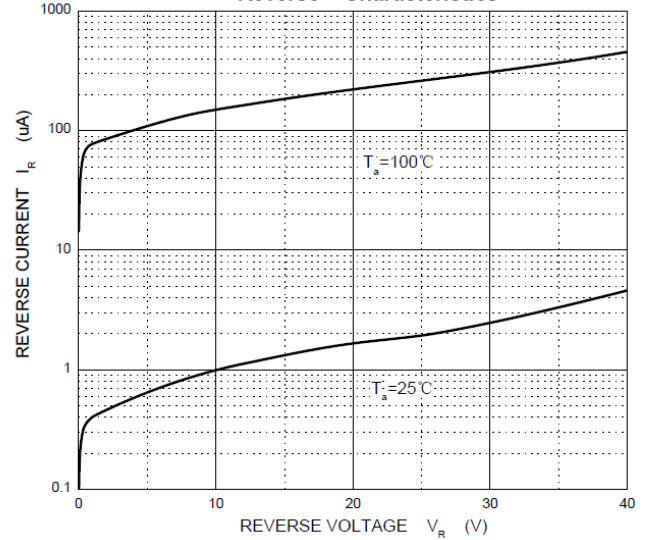
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	V <sub>BR</sub>	20	-	-	V	I <sub>F</sub> =100uA
		30	-	-		
		40	-	-		
Reverse Leakage Current	I <sub>RM</sub>	-	-	5	uA	V <sub>R</sub> =10V
		-	-	5		V <sub>R</sub> =20V
		-	-	5		V <sub>R</sub> =30V
Forward Voltage	V <sub>F</sub>	-	-	0.37	V	I <sub>F</sub> =20mA
		-	-	0.6		I <sub>F</sub> =200mA
Capacitance Between Terminals	C <sub>T</sub>	-	-	50	pF	V <sub>R</sub> =0V, f=1MHz
Reverse Recovery Time	T <sub>RR</sub>	-	10	-	nS	I <sub>F</sub> =I <sub>R</sub> =200mA. I <sub>RR</sub> =0.1xI <sub>R</sub> , R <sub>L</sub> =100Ω

**RATINGS AND CHARACTERISTIC CURVES**

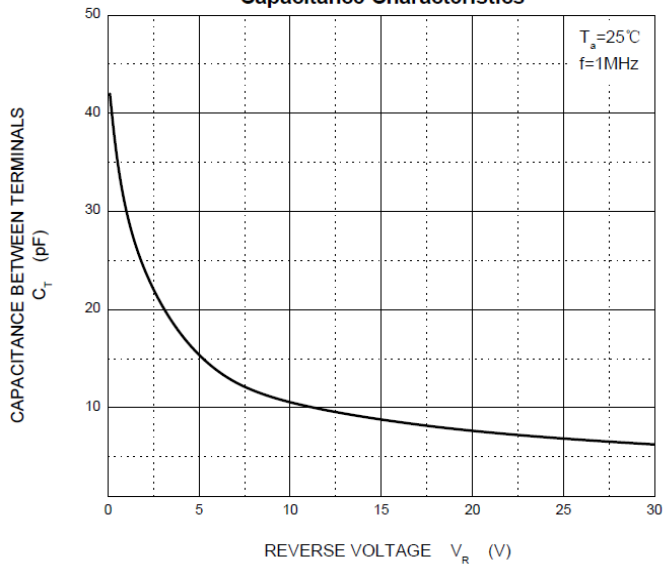
**Forward Characteristics**



**Reverse Characteristics**



**Capacitance Characteristics**



**Power Derating Curve**

