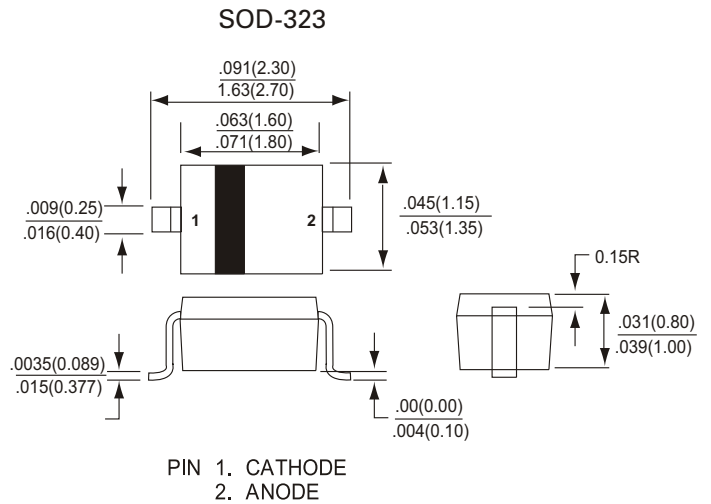


# SD103AWS/SD103BWS/SD103CWS

## SURFACE MOUNT SCHOTTKY BARRIER DIODES

SMALL SIGNAL SCHOTTKY DIODES 350m AMPERES 20~40 VOLTS



### FEATURES

- Low Forward Voltage
- Very Small Conduction Losses
- Schottky Barrier Diodes Encapsulated in SOD-323 Package

### MECHANICAL DATA

Polarity : Cathode Band  
Leads : Solderable per MIL-STD-202 Method 208  
Wight : 0.004grams (approx)

### MAXIMUM RATING (T<sub>A</sub>=25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	SD103AWS	SD103BWS	SD103CWS	UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>				
Working Peak Reverse Voltage	V <sub>RWM</sub>	40	30	20	Volts
DC Blocking Voltage	V <sub>R</sub>				
RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	21	14	Volts
Average Repetitive Output Current	I <sub>FAV</sub>	350			mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0S	I <sub>FSM</sub>	1.5			A
Power Dissipation <sup>(1)</sup>	P <sub>d</sub>	200			mW
Typical thermal Resistance junction to Ambient Note <sup>(1)</sup>	R <sub>θJA</sub>	625			°C / W
Operating & Storage Temperature Range	T <sub>J</sub> T <sub>STG</sub>	-40 to +125			°C

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

CHARACTERISTICS	SYMBOL	Min	Typ	Max	UNITS
Reverse Breakdown Voltage <sup>(2)</sup> SD103AWS (I <sub>R</sub> = 100uA) SD103BWS SD103CWS	V <sub>(BR)R</sub>	40 30 20	-	-	Volts
Forward Voltage Note <sup>(2)</sup> I <sub>F</sub> = 20mA I <sub>F</sub> = 200mA	V <sub>F</sub>	-	-	0.37 0.60	Volts
Reverse Current Note <sup>(2)</sup> V <sub>R</sub> = 30V, SD103AWS V <sub>R</sub> = 32V, SD103BWS V <sub>R</sub> = 10V, SD103CWS	I <sub>R</sub>	-	-	5.0	μAmps
Junction Capacitance, f = 1MHz, V <sub>R</sub> = 0VDC	C <sub>J</sub>	-	50	-	pF
Reverse Recovery Time I <sub>F</sub> = I <sub>F</sub> = 200mA, I <sub>RR</sub> = 0.1 * I <sub>R</sub> , R <sub>L</sub> = 100Ω	T <sub>RR</sub>	-	10	-	nS

NOTES :

1. Valid provided that leads are kept at ambient temperature.
2. Pulse Test: Pulse width=300μs, Duty Cycle ≤ 2%

# SD103AWS/SD103BWS/SD103CWS

## SURFACE MOUNT SCHOTTKY BARRIER DIODES

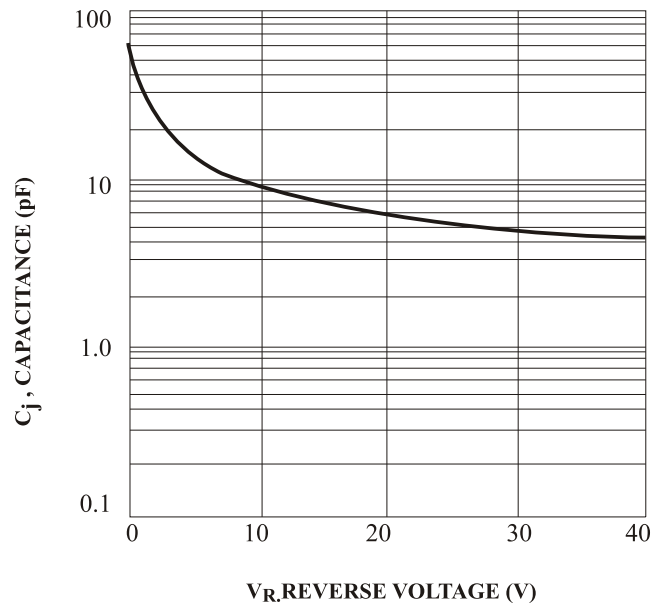


FIG. 2 Typ, Junction Capacitance vs. Reverse Voltage

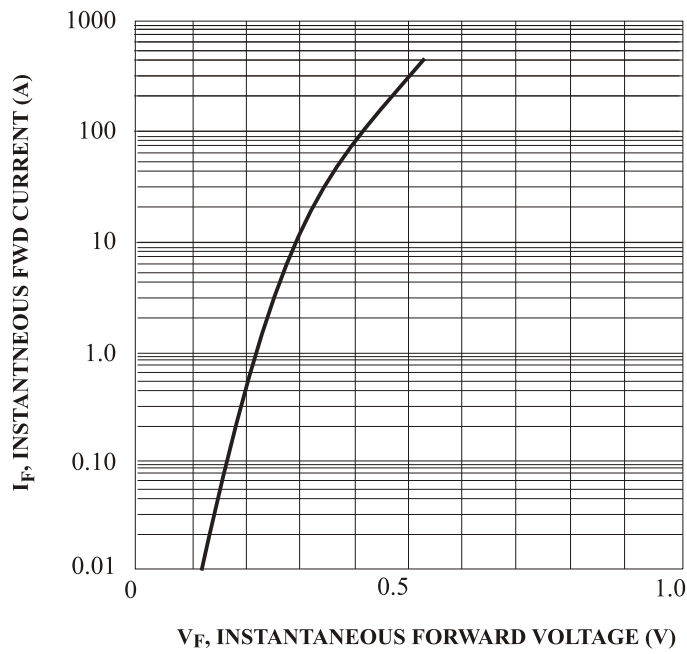


FIG. 2 Typical Forward Characteristics