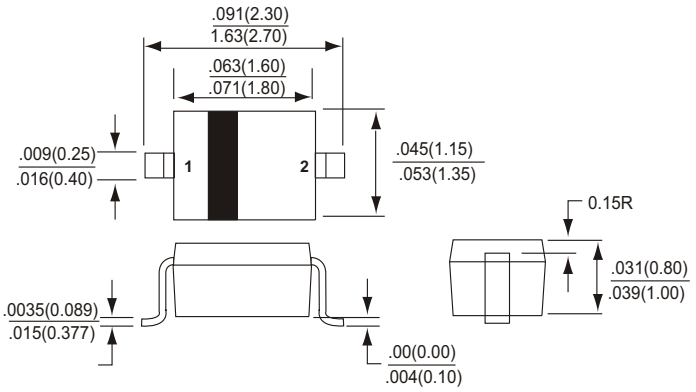
SD103AWS/SD103BWS/SD103CWS

SURFACE MOUNT SCHOTTKY BARRIER DIODES

SMALL SIGNAL SCHOTTKY DIODES 350m AMPERES 20~40 VOLTS

SOD-323



PIN 1. CATHODE
2. ANODE

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
Wigth : 0.004grams (approx)

MAXIMUM RATING (T_A=25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	SD103AWS	SD103BWS	SD103CWS	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	30	20	Volts
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	Volts
Average Repetitive Output Current	I_{FAV}	350			mA
Non-Repetitive Peak Forward Surge Current @ t≦1.0S	I_{FSM}	1.5			A
Power Dissipation (1)	P_D	200			mW
Typical thermal Resistance junction to Ambient Note (1)	$R_{\theta JA}$	625			°C / W
Operating & Storage Temperature Range	T_J T_{STG}	-40 to +125			°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	Min	Typ	Max	UNITS
Reverse Breakdown Voltage (2) (I_R = 100uA) SD103AWS SD103BWS SD103CWS	$V_{(BR)R}$	40 30 20	-	-	Volts
Forward Voltage Note (2) I_F = 20mA I_F = 200mA	V_F	-	-	0.37 0.60	Volts
Reverse Current Note (2) V_R = 30V, SD103AWS V_R = 32V, SD103BWS V_R = 10V, SD103CWS	I_R	-	-	5.0	μ Amps
Junction Capacitance, f = 1MHz, V_R = 0VDC	C_J	-	50	-	pF
Reverse Recovery Time I_F = I_F = 200mA, I_{RR} = 0.1* I_R, R_L = 100Ω	T_{RR}	-	10	-	nS

NOTES :
1. Valid provited that leads are kept at ambient tememperature.
2. Pulse Test: Pulse width=300μs, Duty Cycle≦2%

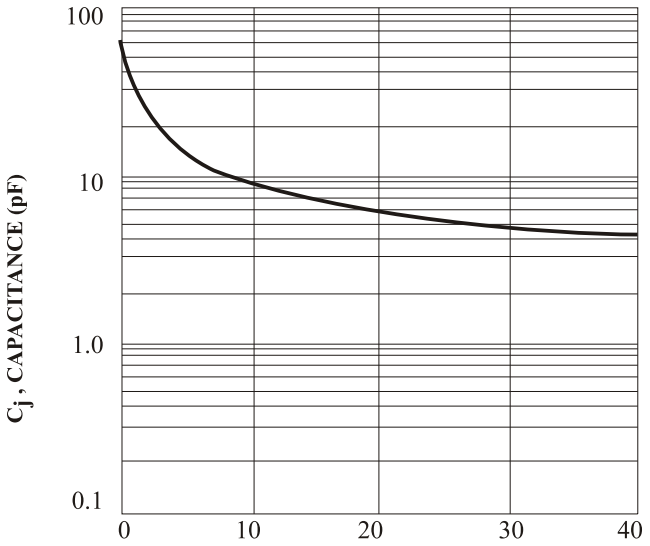
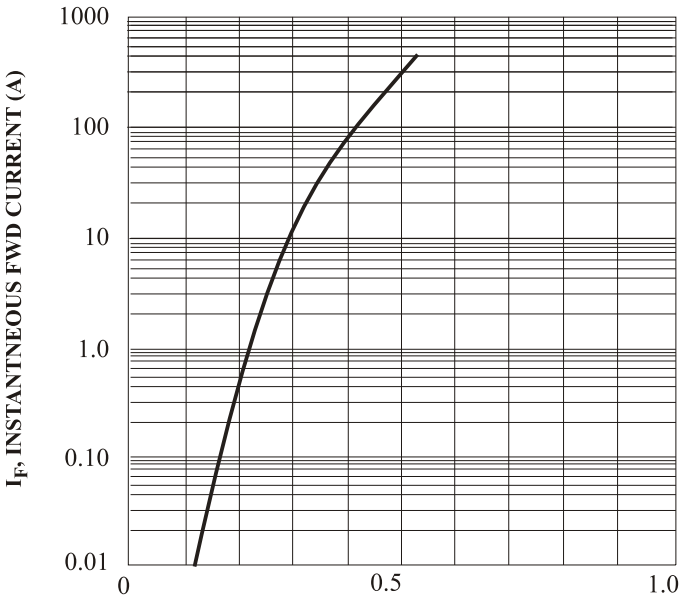


FIG. 2 Typ, Junction Capacitance vs. Reverse Voltage



FIG, 2 Typical Forward Characterictics