

Schottky Barrier Diode

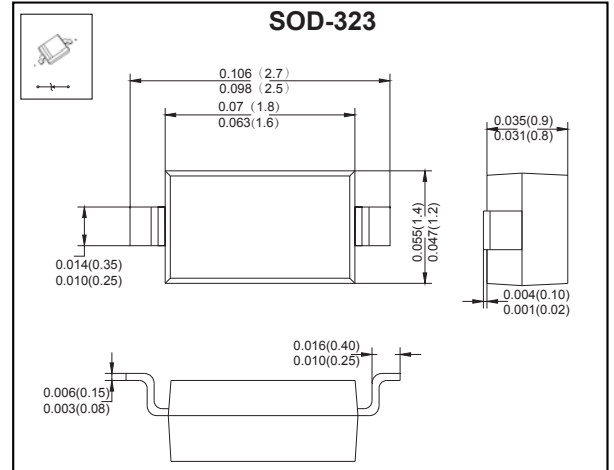
VOLTAGE RANGE: 20V-40V PEAK PULSE POWER:200mW

FEATURES

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

MECHANICAL DATA

- Case: SOD-323 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 C ambient temperature unless otherwise specified

Parameter	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}				
Working Peak Reverse Voltage	V_{RWM}	40	30	20	V
DC Blocking Voltage	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	V
Forward Continuous Current	I_{FM}	350			mA
□□□□epetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0			A
Power Dissipation	P_d	200			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500			°C/W
Junction Temperature	T_j	125			°C
Storage Temperature	T_{STG}	-55~+150			°C

Electrical Specification ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	40			V	$I_R=100\mu\text{A}$
SD103AWS		30				$I_R=100\mu\text{A}$
SD103BWS		20				$I_R=100\mu\text{A}$
Forward voltage	V_F			0.37 0.60	V	$I_F=20\text{mA}$ $I_F=200\text{mA}$
Reverse current	I_{RM}			5.0		μA
SD103AWS						
SD103BWS						
Capacitance between terminals	C_T			50	pF	$V_R=0\text{V}, f=1.0\text{MHz}$
Reverse recovery time	t_{rr}		10		ns	$I_F=I_R=200\text{mA}$ $I_{rr}=0.1I_R, R_L=100\Omega$

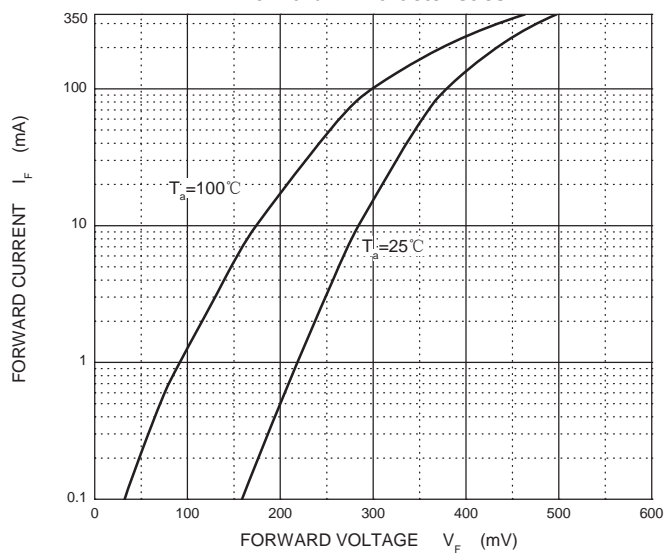
MARKING:

SD103AWS	SD103BWS	SD103CWS
S4	S5	S6

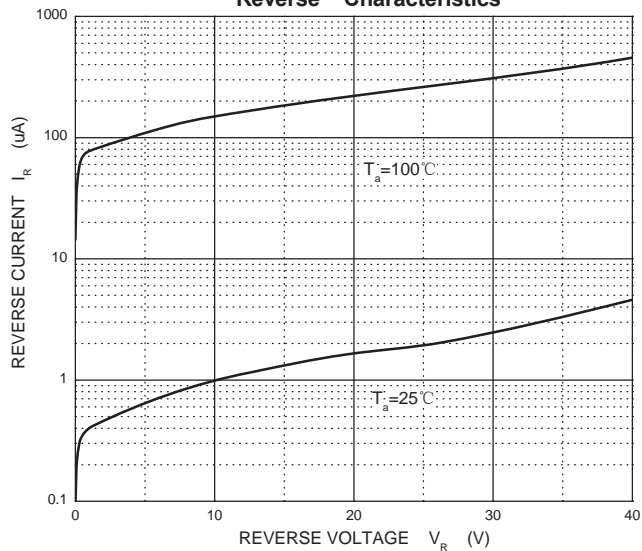
RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics

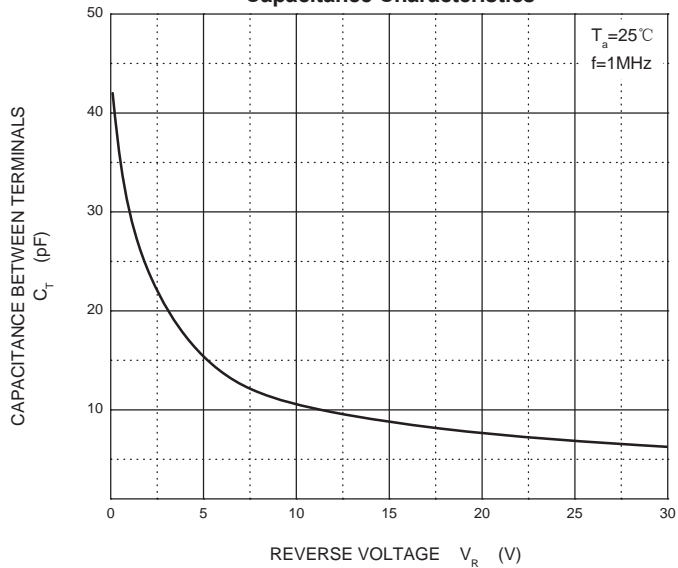
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

