



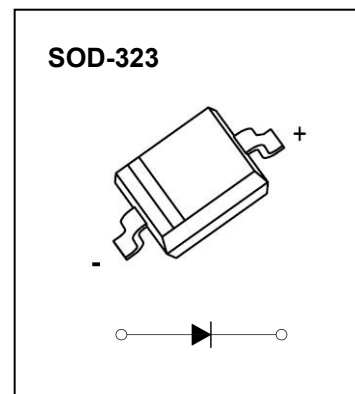
SCHOTTKY BARRIER DIODE

FEATURES

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

MARKING:

SD103AWS:S4	SD103BWS:S5	SD103CWS:S6



The marking bar indicates the cathode
Solid dot = Green molding compound device, if none,
the normal device.

Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

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
Repetitive Peak Forward Surge Current @1, " a s	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

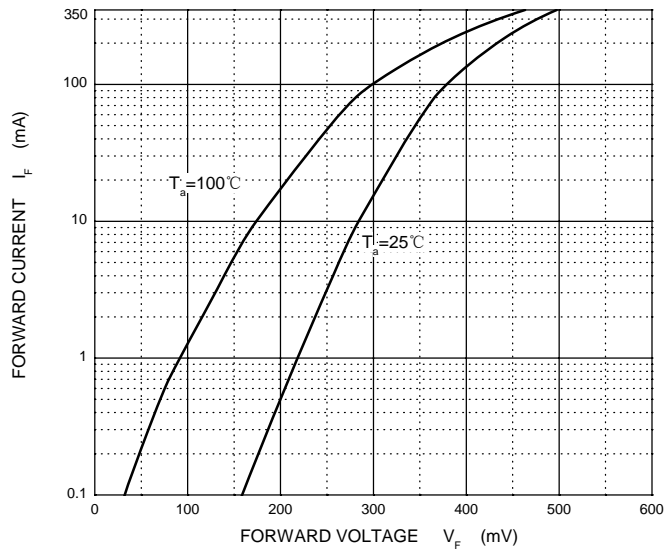
Electrical Ratings @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$				V	
SD103AWS		40				$I_R=100\mu A$
SD103BWS		30				$I_R=100\mu A$
SD103CWS		20				$I_R=100\mu A$
Forward voltage	V_F			0.37 0.60	V	$I_F=20mA$ $I_F=200mA$
Reverse current	I_{RM}			5.0	μA	$V_R=30V$ $V_R=20V$ $V_R=10V$
Capacitance between terminals	C_T			50	pF	$V_R=0V, f=1.0MHz$
Reverse recovery time	t_{rr}		10		ns	$I_F=I_R=200mA$ $I_{rr}=0.1I_R, R_L=100\Omega$

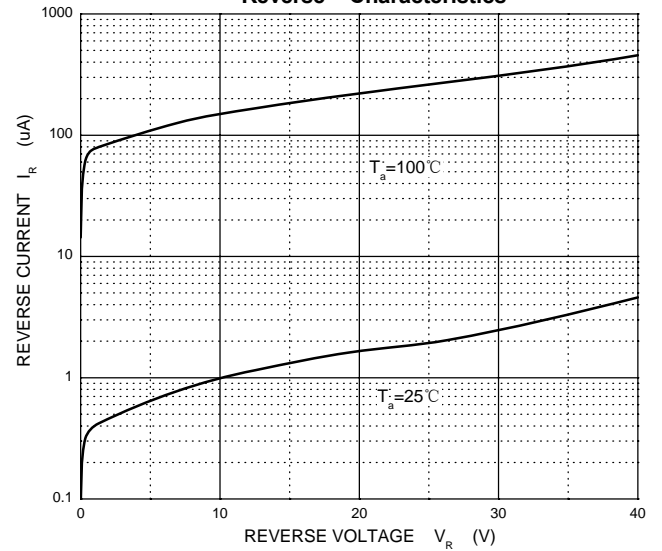


Typical Characteristics

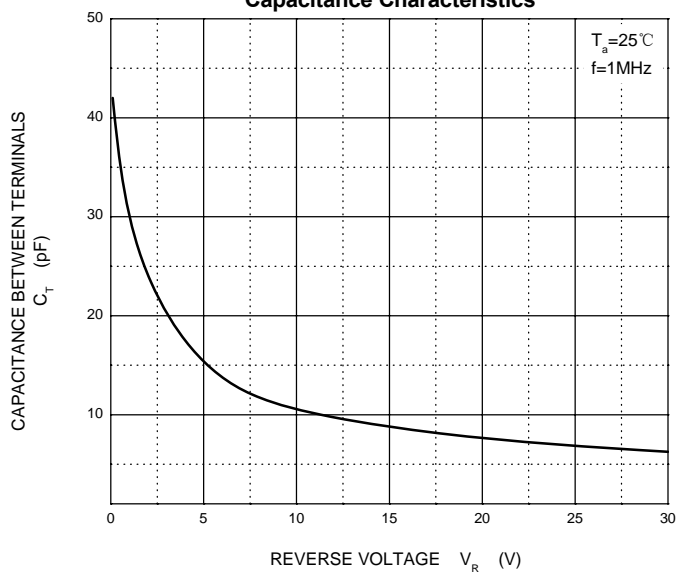
Forward Characteristics



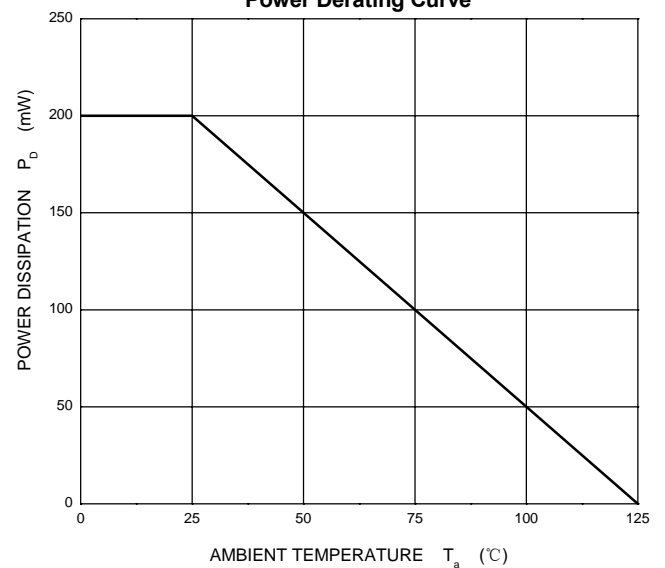
Reverse Characteristics



Capacitance Characteristics

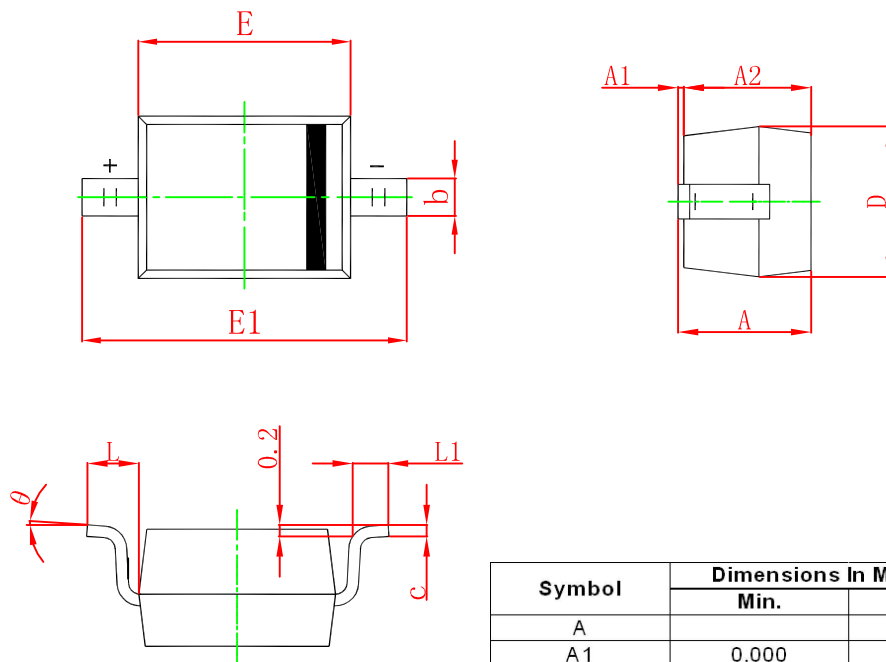


Power Derating Curve



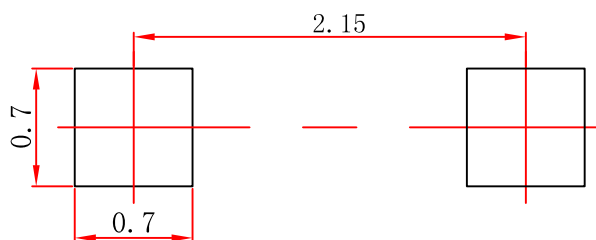


SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

SOD-323 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.