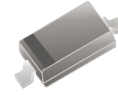


SD103xWS-P2-HF Series

RoHS Device
Halogen Free



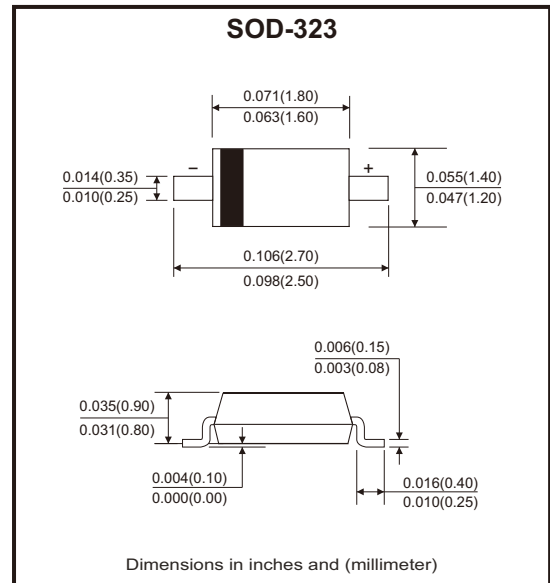
Features

- Low power loss for high efficiency.
- Low forward voltage schottky rectifier.

Mechanical data

- Case: SOD-323, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any.

Circuit Diagram



Maximum Rating (at Ta=25°C unless otherwise noted)

Parameter	Symbol	SD103AWS-P2-HF	SD103BWS-P2-HF	SD103CWS-P2-HF	Unit
Non-repetitive peak reverse voltage	V_{RM}	40	30	20	V
Repetitive peak reverse voltage	V_{RRM}	40	30	20	
RMS reverse voltage	V_{RMS}	28	21	14	
Average rectified output current	I_o	350			mA
Non-repetitive peak forward surge current @ 8.3ms single half sine-wave	I_{FSM}	2			A
Power dissipation	P_D	200			mW
Junction temperature	T_J	125			°C
Storage temperature range	T_{STG}	-55 to +125			°C

Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse breakdown voltage	SD103AWS-P2-HF $I_R = 100\mu A$	V_{BR}	40			V
	SD103BWS-P2-HF $I_R = 100\mu A$	V_{BR}	30			
	SD103CWS-P2-HF $I_R = 100\mu A$	V_{BR}	20			
Forward voltage	$I_F = 20mA$	V_F			0.37	V
	$I_F = 200mA$	V_F			0.6	
Reverse current	SD103AWS-P2-HF $V_R = 30V$	I_R			5	μA
	SD103BWS-P2-HF $V_R = 20V$	I_R			5	
	SD103CWS-P2-HF $V_R = 10V$	I_R			5	
Capacitance	$V_R = 0V, f = 1MHz$	C_J			50	pF
Reverse recovery time	$I_F = I_R = 200mA, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$	t_{rr}		10		nS

Typical Rating and Characteristic Curves (SD103xWS-P2-HF Series)

Fig.1 - Typical Instantaneous Forward Characteristics

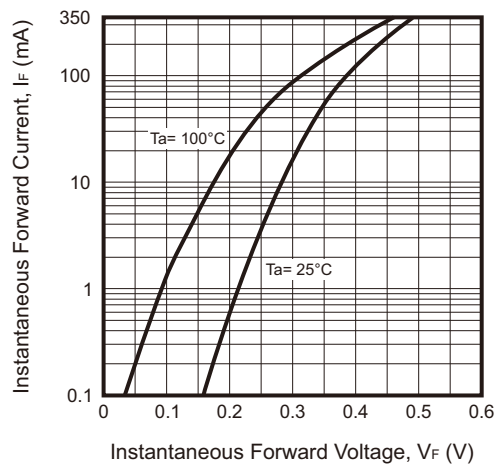


Fig.2 - Typical Reverse Leakage Characteristics

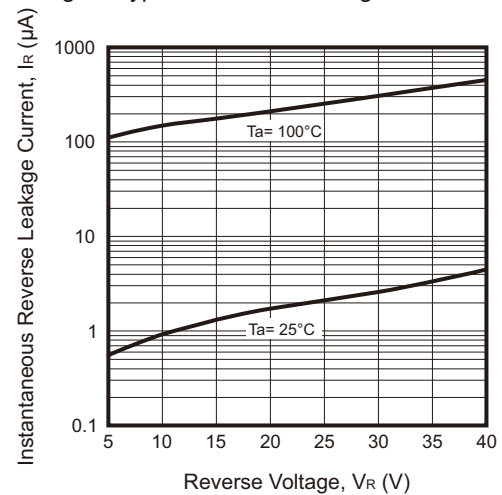


Fig.3 - Power Derating Curve

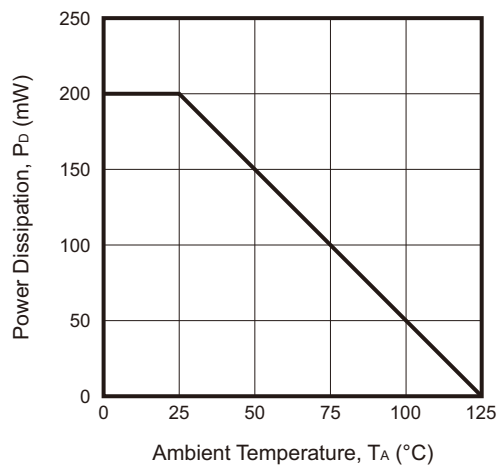
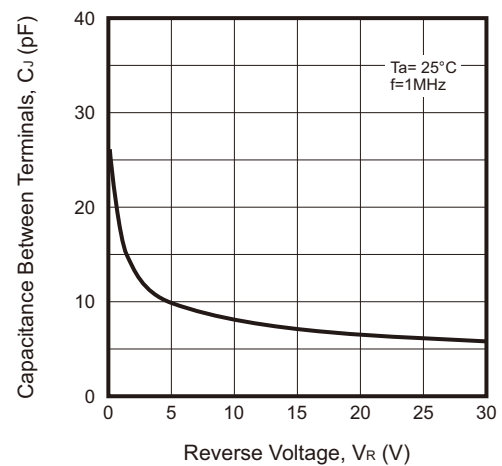
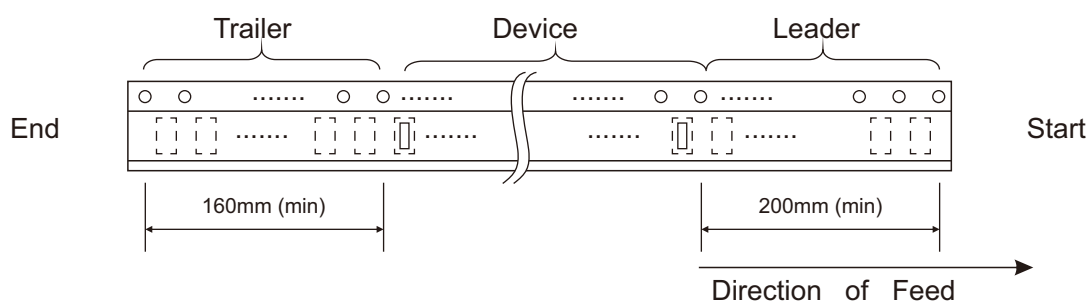
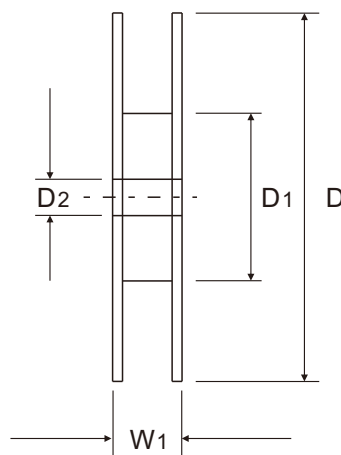
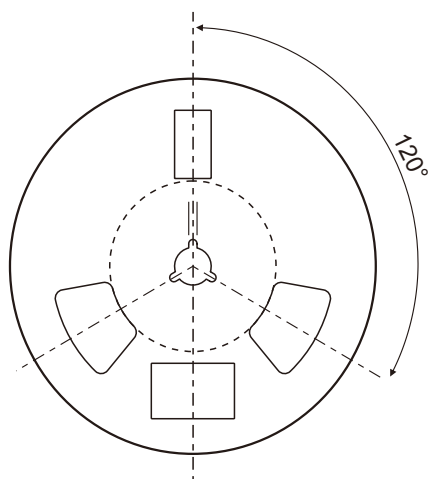
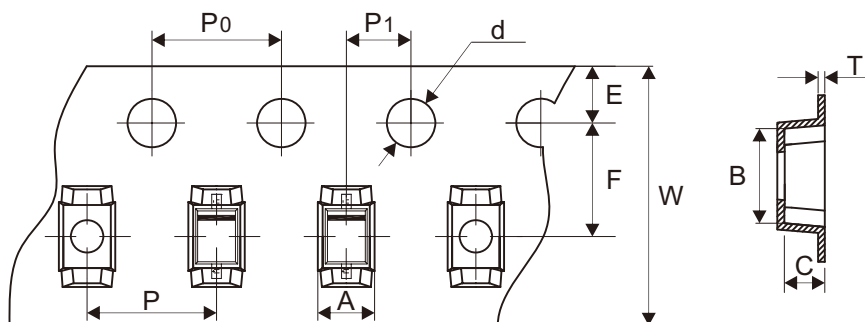


Fig.4 - Capacitance Characteristics



Reel Taping Specification



SOD-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.46 ± 0.10	2.925 ± 0.075	1.25 ± 0.10	1.55 ± 0.05	178.00 ± 2.00	50.00 ± 0.50	13.00 ± 0.25
	(inch)	0.057 ± 0.004	0.115 ± 0.003	0.049 ± 0.004	0.061 ± 0.002	7.008 ± 0.079	1.969 ± 0.020	0.512 ± 0.010

SOD-323	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.254 ± 0.02	$8.00 + 0.30 - 0.10$	9.50 ± 0.50
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.010 ± 0.001	$0.315 + 0.012 - 0.004$	0.374 ± 0.020

Marking Code

Part Number	Marking Code
SD103AWS-P2-HF	S4
SD103BWS-P2-HF	S5
SD103CWS-P2-HF	S6

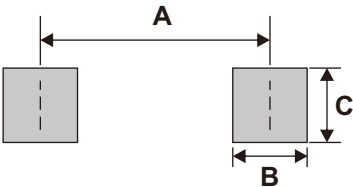


■ = Cathode band

XX = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	2.15	0.085
B	0.70	0.028
C	0.70	0.028



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-323	3,000	7