

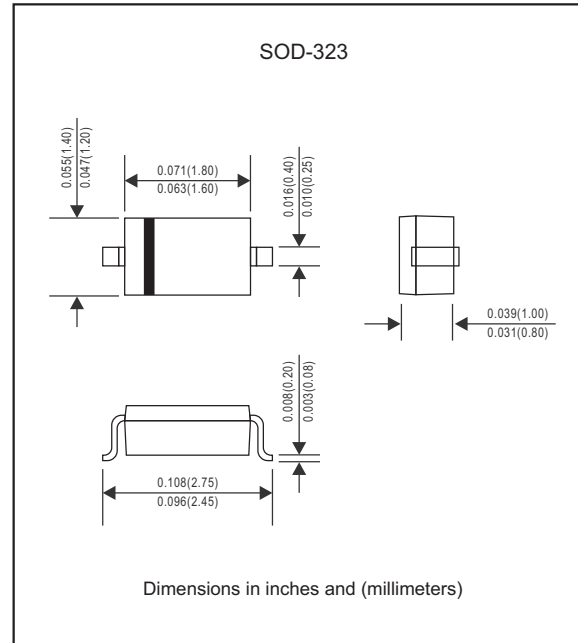
Features

- Low current rectification and high speed switching.
- Extremely small surface mount type.
- Low forward voltage drop.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free parts for green partner, exceeds environmental standards of MIL-STD-19500 /228
- Compliant to Halogen-free

Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, SOD-323
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any

Package outline



Maximum ratings (AT T_A=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V _{RRM}	Repetitive Peak Reverse Voltage	60	V
V _R	DC Blocking Voltage	60	V
V _{R(RMS)}	RMS reverse voltage (DC)	42	V
I _O	Continuous Forward Current	15	mA
I _{FSM}	Non-Repetitive Peak Forward Current *1	2	A
P _D	Power Dissipation	200	mW
T _J	Junction Temperature	125	°C
T _{STG}	Storage Temperature	-55 to +150	°C

*1 8.3 ms single half sine-wave

Electrical characteristics (AT T_A=25°C unless otherwise noted)

Symbol	Parameter	Conditions	Min	Max	Units
BV _R	Breakdown Voltage	I _R = 10 μA	60		V
I _R	Reverse Current	V _R = 50V		0.2	μA
V _F	Forward Voltage	I _F = 1.0mA		0.41	V
		I _F = 15mA		1.00	V
C _T	Capacitance between terminals	V _R = 0V, f=1MHZ		2.0	pf
t _{rr}	Reverse recovery time	I _F = I _R = 5mA, I _{rr} = 0.1 * I _R , R _L = 100 Ω,		1.0	ns

Rating and characteristic curves (SD101AWS)

Fig. 1 POWER DERATING CURVE

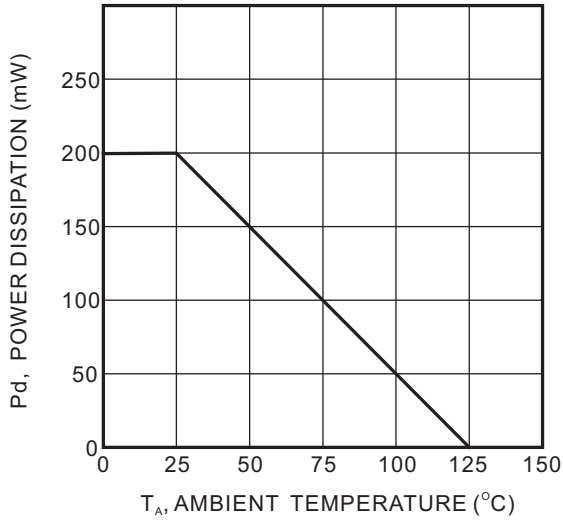


Fig. 2 TYPICAL FORWARD CHARACTERISTIC

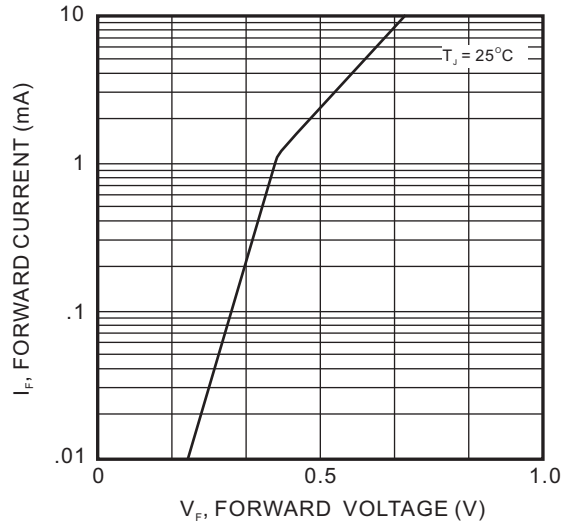


Fig. 3 TYPICAL TOTAL CAPACITANCE vs. REVERSE VOLTAGE

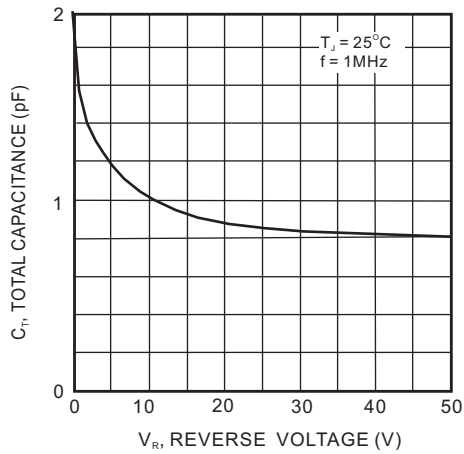
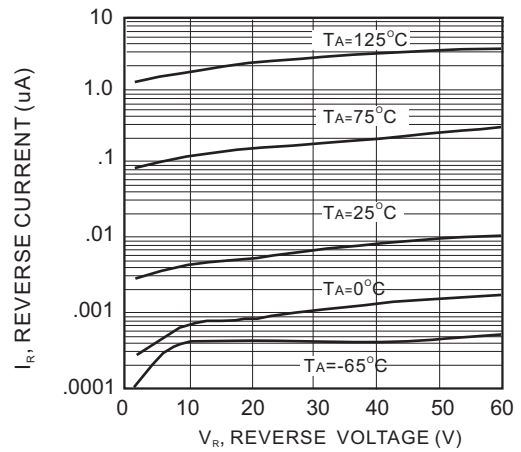




Fig. 4 TYPICAL REVERSE CHARACTERISTICS



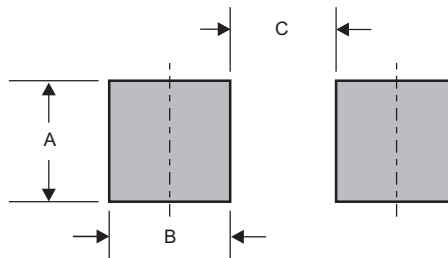
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
SD101AWS	SA

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-323	0.033 (0.83)	0.025 (0.63)	0.063 (1.60)