

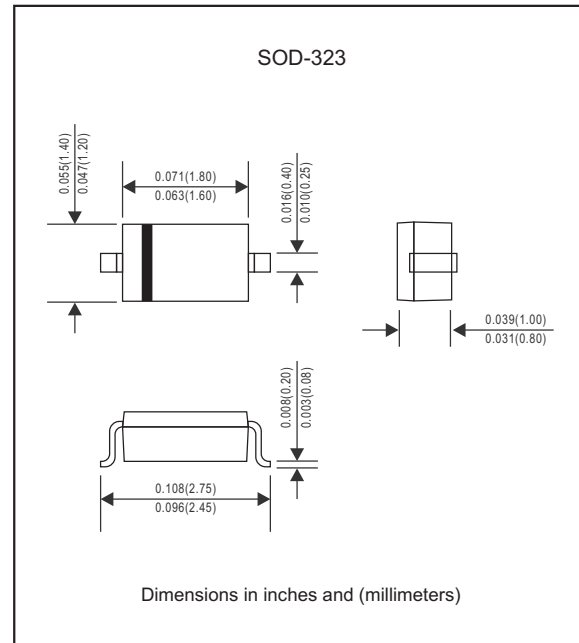
Features

- Low current rectification and high speed switching.
- Small surface mount type.
- Up to 70mA current capability.
- Low forward voltage drop ($V_F = 1.00V$ typ. @15mA)
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free parts for green partner, exceeds environmental standards of MIL-STD-19500 /228
- High speed ($t_{rr} < 5$ ns)
- Compliant to Halogen - free
- Suffix "-Q1" for AEC-Q101

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

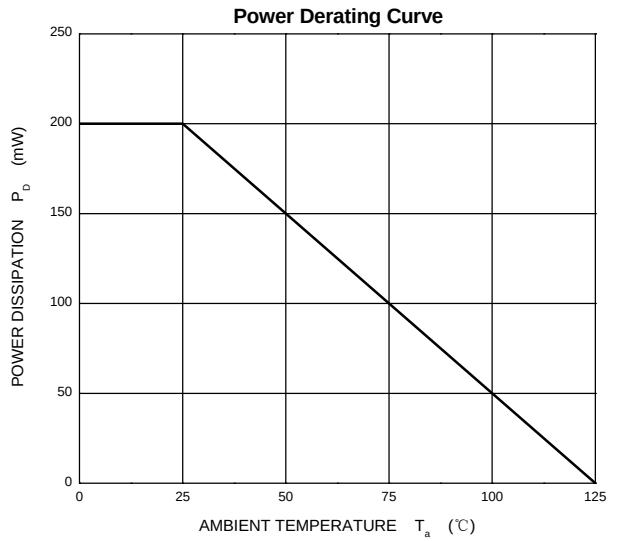
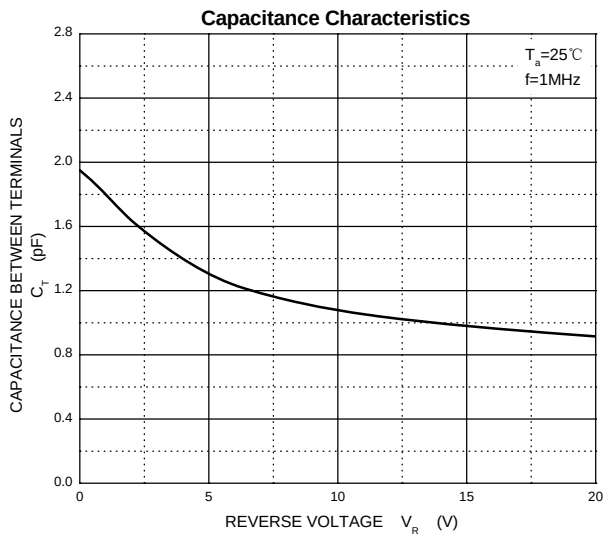
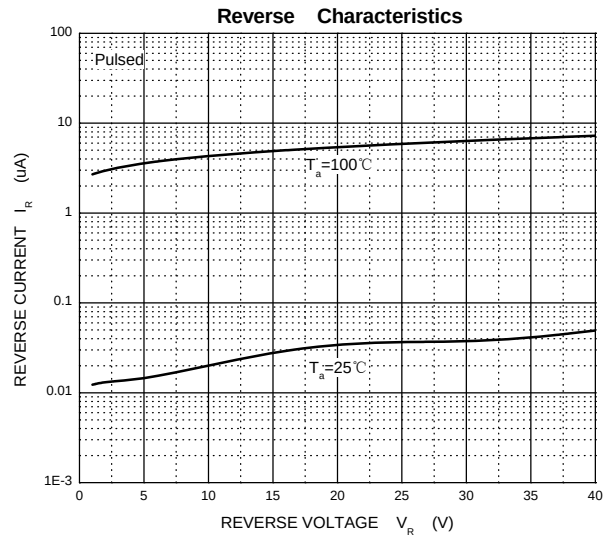
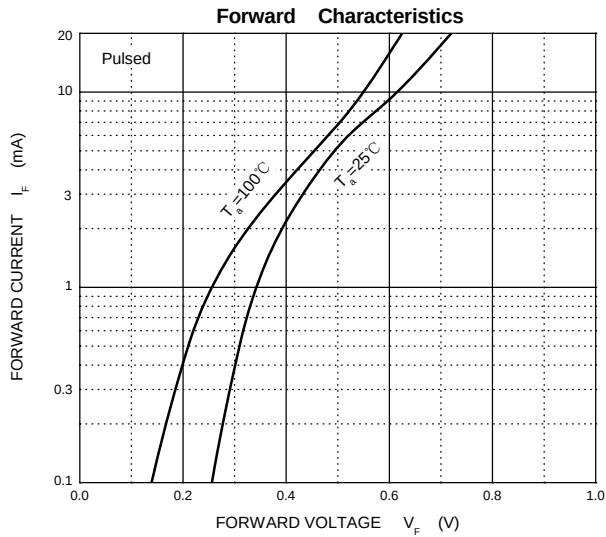
Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^{\circ}C$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Repetitive peak reverse voltage		V_{RRM}			70	V
Reverse voltage		V_R			70	V
Repetitive peak forward current	@ $t < 1.0s$	I_{FSM}			100	mA
Forward current		I_F			70	mA
Power Dissipation		P_D			200	mW
Thermal Resistance	Junction to Ambient	$R_{\theta JA}$			625	$^{\circ}C/W$
Junction temperature		T_J	-55		+125	$^{\circ}C$
Storage temperature		T_{STG}	-65		+125	$^{\circ}C$
Forward voltage	$I_F = 1.0$ mA	V_F			0.41	V
	$I_F = 15$ mA	V_F			1.00	V
Reverse current	$V_R = 50$ V	I_R			100	nA
Diode capacitance	$V_R = 0$ V, $f = 1$ MHz	C_D			2	pF
Reverse recovery time	$I_F = 10$ mA, $V_R = 10$ mA, $I_{RR} = 0.1 \times I_R$, $R_L = 100 \Omega$	t_{rr}			5	ns

Typical Characteristics



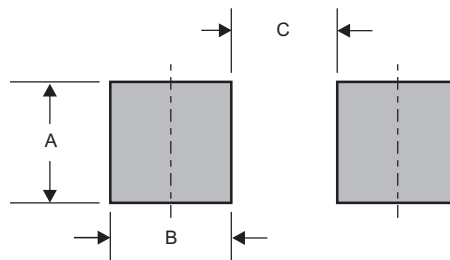
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
BAS70WS-Q1	K73

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)