

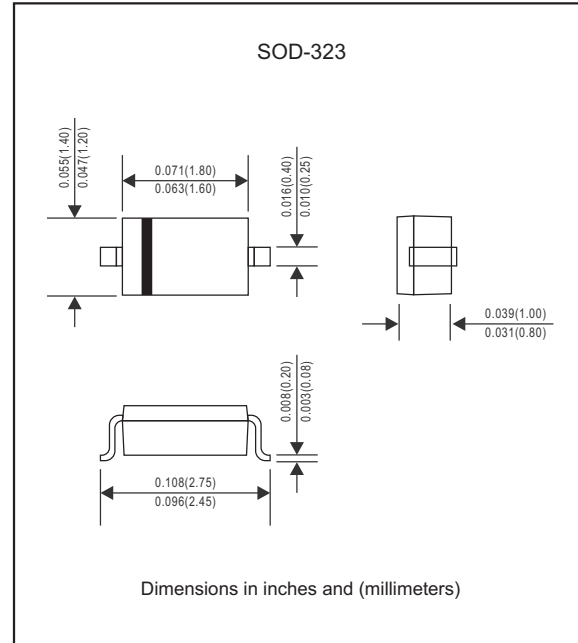
Features

- Low Reverse Current.
- Surface Mount Package Ideally Suited for Automatic Insertion.
- Fast Switching Speed.
- For General Purpose Switching Applications.
- Silicon epitaxial planar chip.
- Lead-free parts meet RoHS requirements.
- 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

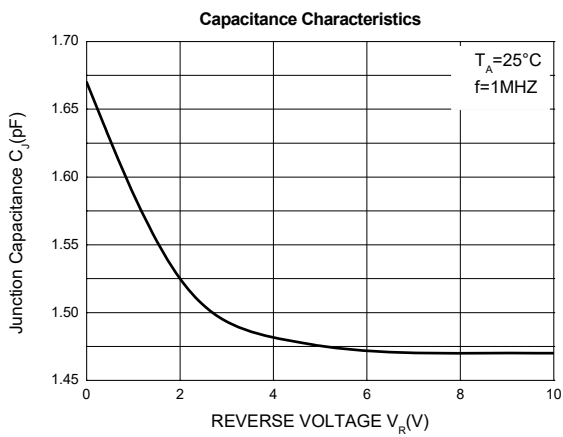
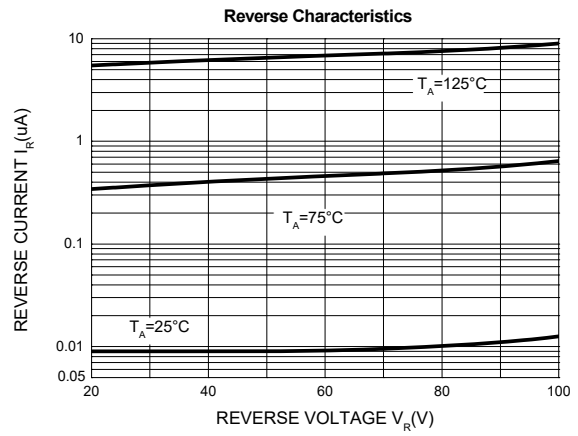
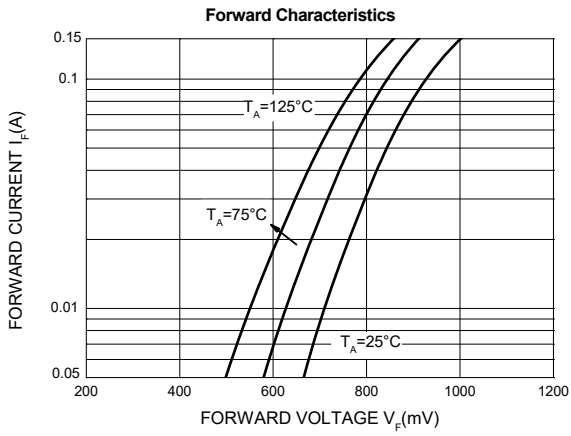


Maximum ratings and Electrical Characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)



PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Repetitive Peak Reverse Voltage	V_{RRM}	V		100
Average Forward Current	I_{FAV}	mA		250
Peak Forward Surge Current	I_{FSM}	A	$t_p=1\mu\text{s}$	2
Power Dissipation	P_D	mW		200
Thermal Resistance Junction To Ambient air	R_{thJA}	K/W		625
Junction Temperature	T_j	$^{\circ}\text{C}$		-55 to +150
Storage Temperature Range	T_{stg}	$^{\circ}\text{C}$		-55 to +150

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	MAX
Forward Voltage	V_F	V	$I_F=1\text{mA}$		0.715
			$I_F=10\text{mA}$		0.855
			$I_F=50\text{mA}$		1.0
			$I_F=150\text{mA}$		1.25
Reverse Current	I_R	nA	$V_R=20\text{V}$		25
	I_R	μA	$V_R=75\text{V}$		1.0
Reverse Breakdown Voltage	V_{BR}	V	$I_R=100\mu\text{A}$	100	
Junction Capacitance	C_j	pF	$V_R=V_F=0\text{V}$, $f=1\text{MHz}$		4
Reverse Recovery Time	t_{rr}	ns	$I_F=I_R=50\text{mA}$, $I_{tr}=0.1I_R$, $R_L=100\Omega$		4

Rating and characteristic curves



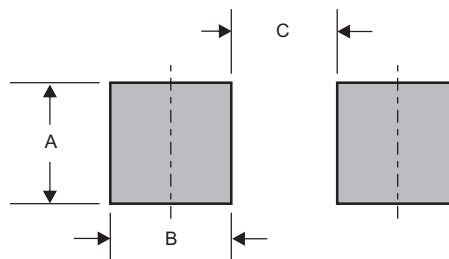
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
BAS316	A6

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-323	0.032 (0.82)	0.022 (0.56)	0.069 (1.75)