

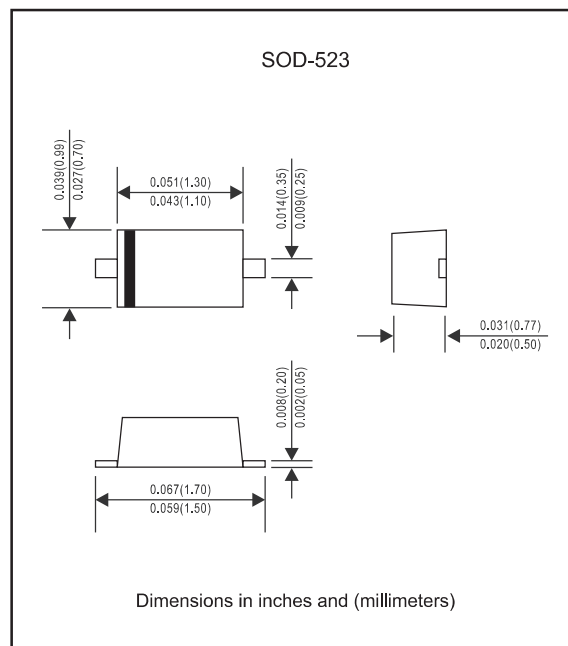
Features

- Fast switching speed
- Epitaxial planar die construction
- For General Purpose Switching Applications
- Compliant to Halogen-free
- Suffix "-Q1" for AEC-Q101

Mechanical data

- Case: SOD-523
- Molding Compound: UL 94-V0 rated flame retardant.
- Terminals: Matte tin-plated leads; solderable Per MIL-STD-202, Method 208

Package outline



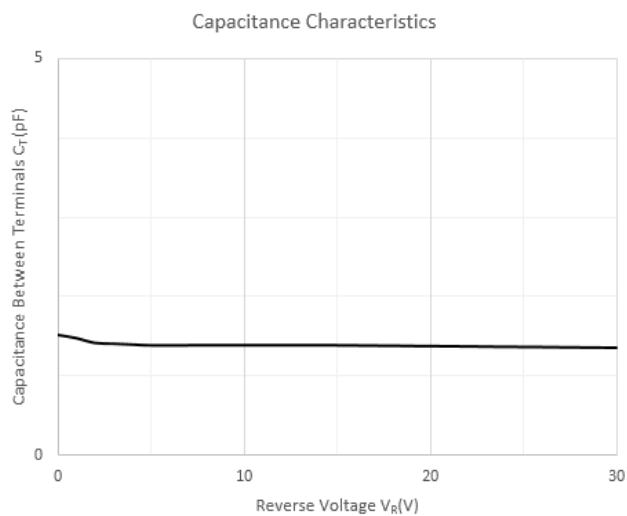
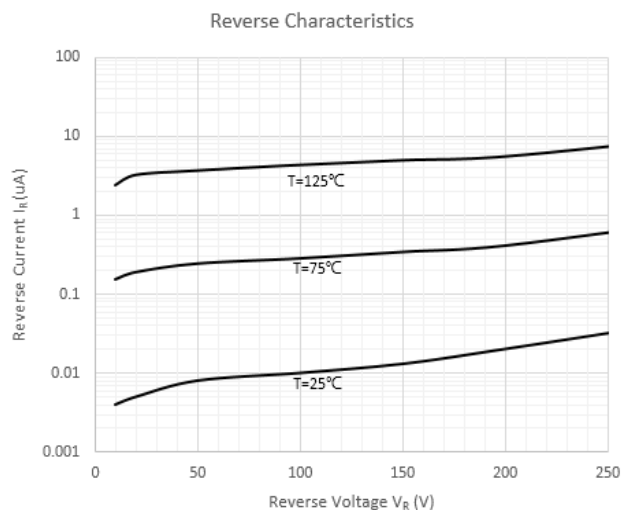
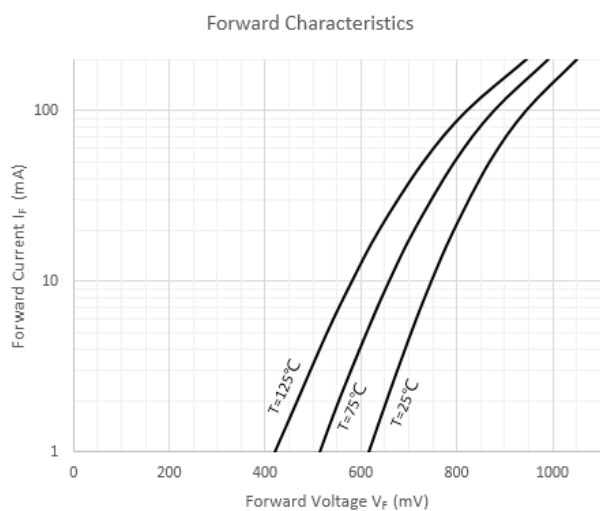
Maximum Ratings (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	250	V
Reverse Voltage	V_R	250	V
Forward Current	I_F	200	mA
Non-Repetitive Peak Forward Surge Current, $t_p = 1\text{ms}$	I_{FSM}	2	A
Power Dissipation	P_D	150	mW
Operating Junction Temperature Range	T_J	-55 ~ +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^\circ\text{C}$

Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V_R	$I_R = 100\mu\text{A}$	250	-	-	V
Forward Voltage	V_F	$I_F = 100\text{mA}$	-	-	1.1	V
Maximum Peak Reverse Current	I_R	$V_R = 200\text{V}$	-	-	0.15	μA
Maximum Diode Capacitance	C_D	$V_R = 0\text{V}$, $f = 1\text{MHz}$	-	-	5	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 30\text{mA}$ $I_{rr} = 0.1 \times I_R$, $R_L = 100\Omega$	-	-	50	ns

Rating and characteristic curves



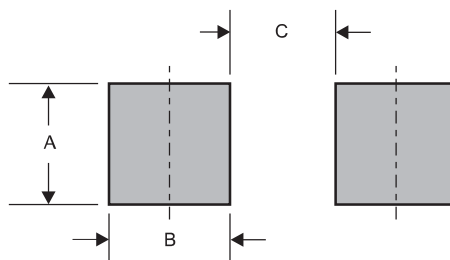
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
BAV21WT-Q1	JS / T3

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-523	0.032 (0.80)	0.024 (0.60)	0.044 (1.10)