



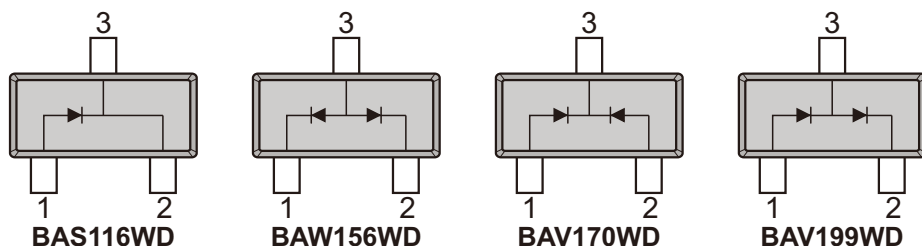
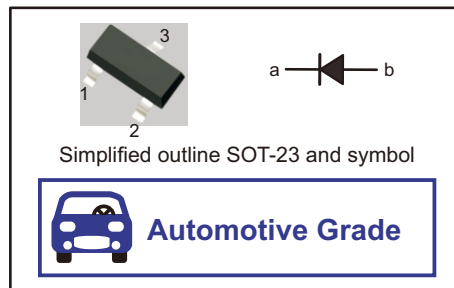
## Switching Diodes

### FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- Qualified to AEC-Q101 Standards for High Reliability

### PINNING

PIN	DESCRIPTION
a	Cathode
b	Anode



### Maximum Ratings @Ta=25°C

Parameter	Symbol	Value	Unit
Reverse Voltage	$V_R$	85	V
Forward Current	$I_F$	215 125	mA
Non-Repetitive Peak Forward Surge Current @t=1ms	$I_{FSM}$	1.0	A
Power Dissipation	$P_D$	225	mW
Thermal Resistance Junction to Ambient	$R_{thJA}$	417	°C/W
Operation Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 ~ +150	°C

### Electrical Characteristics @Ta=25°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_R$	$I_R=100\mu A$	85			V
Forward voltage	$V_{F1}$	$I_F=1\text{ mA}$			0.9	V
	$V_{F2}$	$I_F=10\text{ mA}$			1.0	V
	$V_{F3}$	$I_F=50\text{ mA}$			1.1	V
	$V_{F4}$	$I_F=150\text{ mA}$			1.25	V
Reverse current	$I_R$	$V_R=75\text{ V}$			5	nA
Capacitance between terminals	$C_T$	$V_R=0, f=1\text{ MHz}$			2	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10\text{ mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$			3	ns



Fig.1 Power Derating Curve

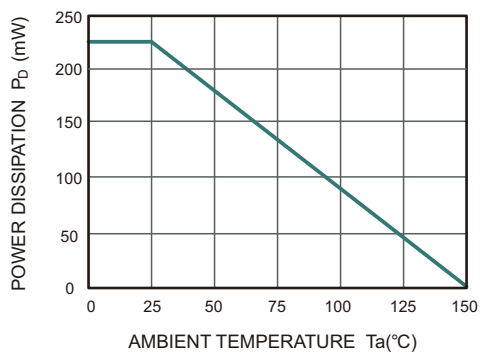


Fig.2 Reverse Characteristics

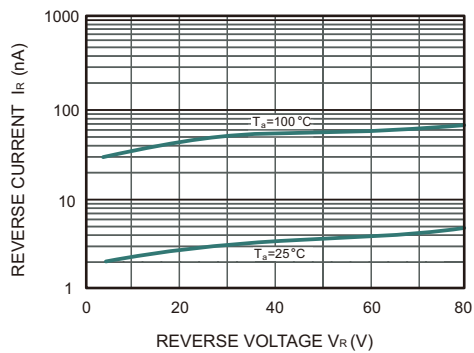


Fig.3 Forward Characteristics

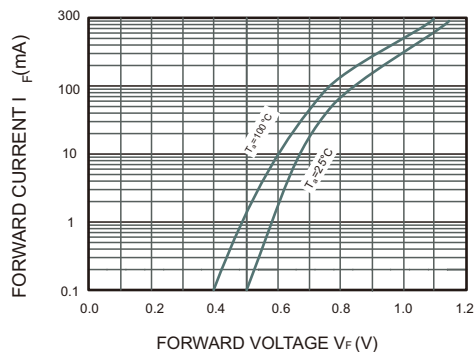
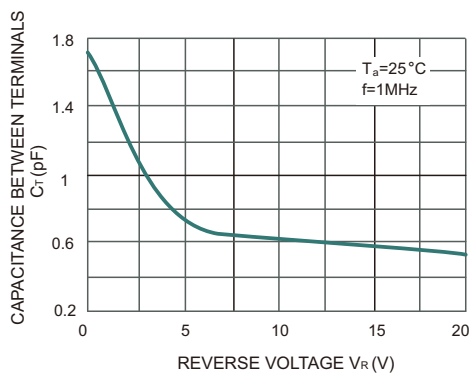
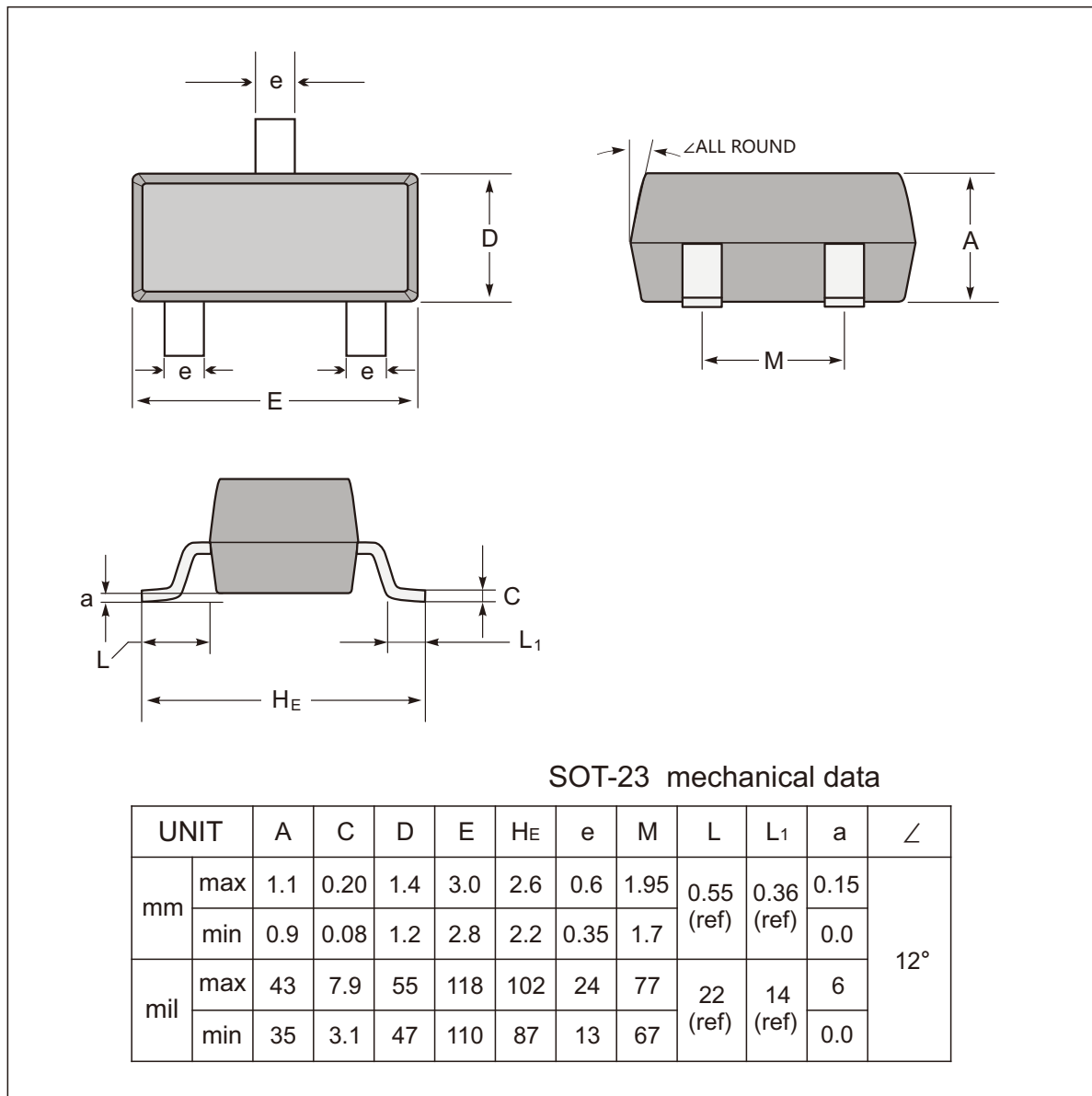


Fig.4 Capacitance Characteristics

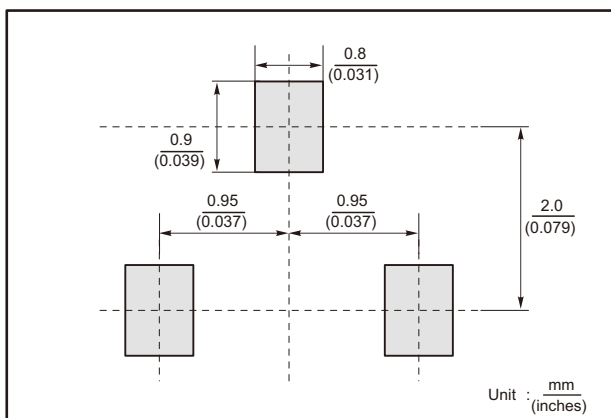




### SOT-23 Package Outline Dimensions



#### The recommended mounting pad size



#### Marking

Type number	Marking code
BAS166WD	K50
BAW156WD	53
BAV170WD	51
BAV199WD	52



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