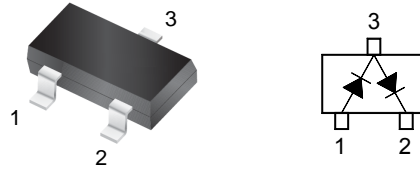


Dual Switching Diode in SOT-23

Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



Mechanical Data

- **Case:** SOT-23 (plastic package).
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

- Single Switch
- Polarity Protection

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

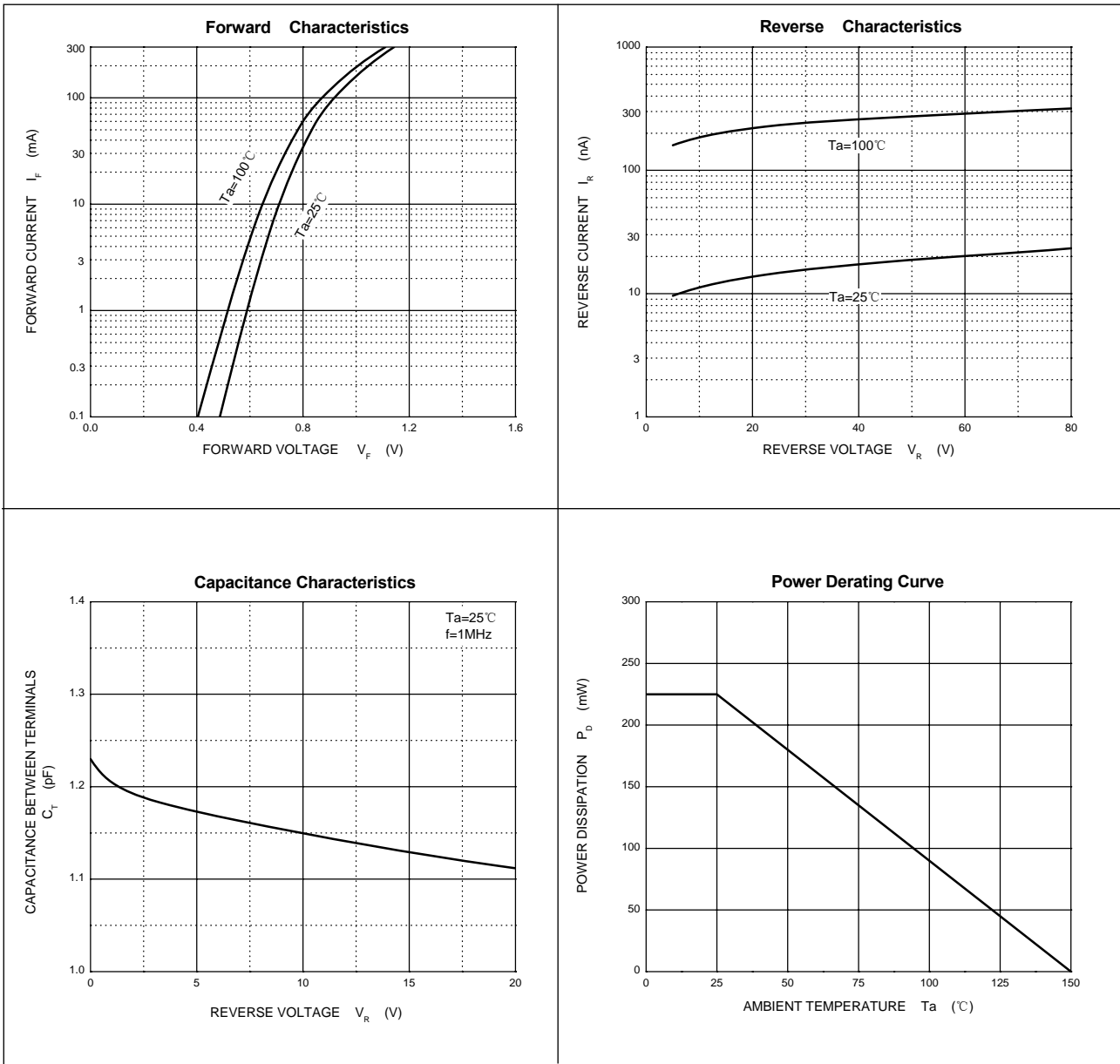
Parameter	Symbol	Limit	Unit
Reverse Voltage	V_R	70	V
Forward Current	I_F	200	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3ms$	I_{FSM}	2.0	A
Power Dissipation	P_D	225	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	556	°C/W
Junction Temperature	T_J	150	°C
Storage Temperature range	T_{STG}	-55~+150	°C

Electrical Characteristics

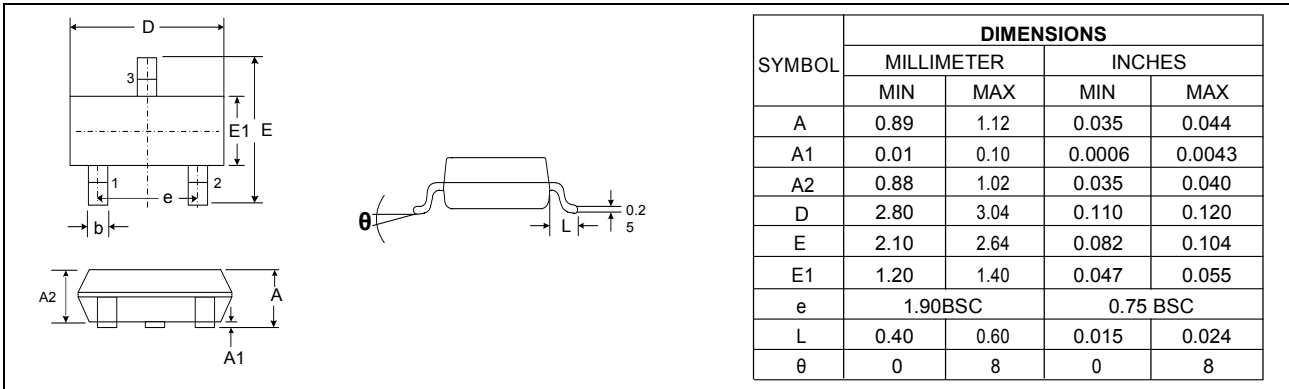
($T_A = 25\text{ °C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	V_R	70			V	$I_R=100\mu A$
Forward voltage	V_{F1}			0.715	V	$I_F=1mA$
	V_{F2}			0.855	V	$I_F=10mA$
	V_{F3}			1	V	$I_F=50mA$
	V_{F4}			1.25	V	$I_F=150mA$
Reverse current	I_R			2.5	μA	$V_R=70V$
Capacitance between terminals	C_T			1.5	pF	$V_R=0, f=1MHz$
Reverse recovery time	t_{rr}			6	ns	$I_F = I_R = 10mA,$ $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

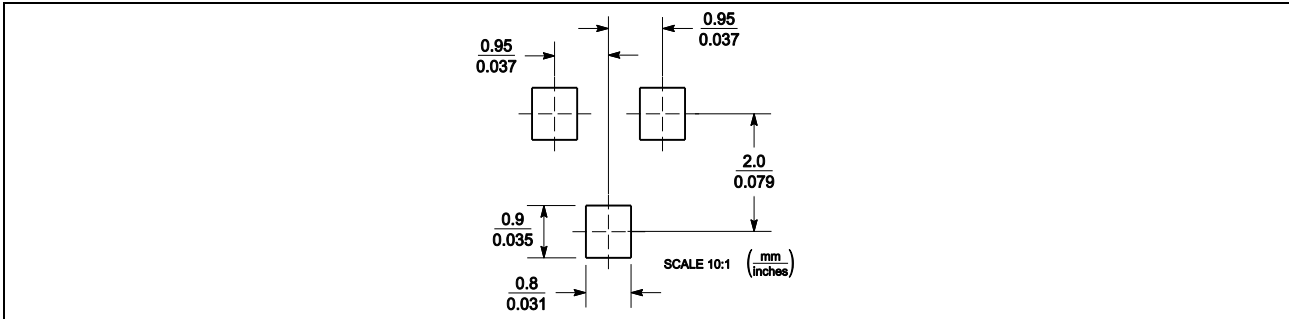
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



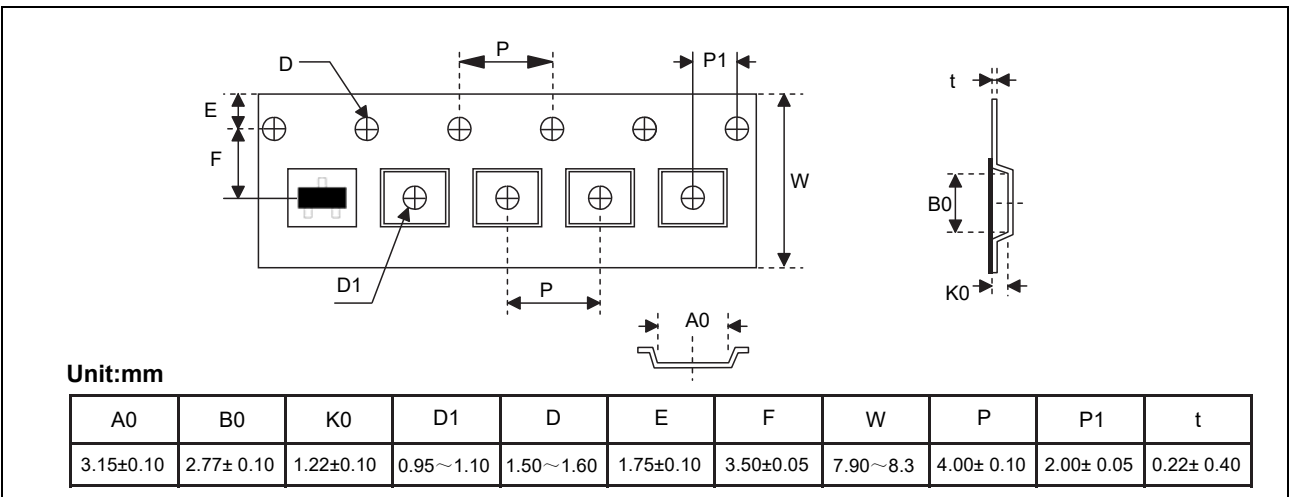
Package Dimensions



Pad Dimensions



Package Information



Ordering information

Order code	Package	Marking	Packaging option	Base quantity	Packaging specification
BAV99	SOT-23	A7	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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