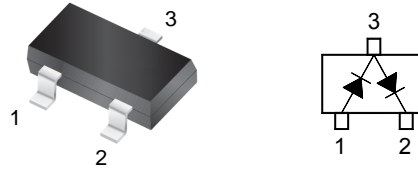


## Dual Switching Diode in SOT-23

### Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- Meet MSL level 2



### 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

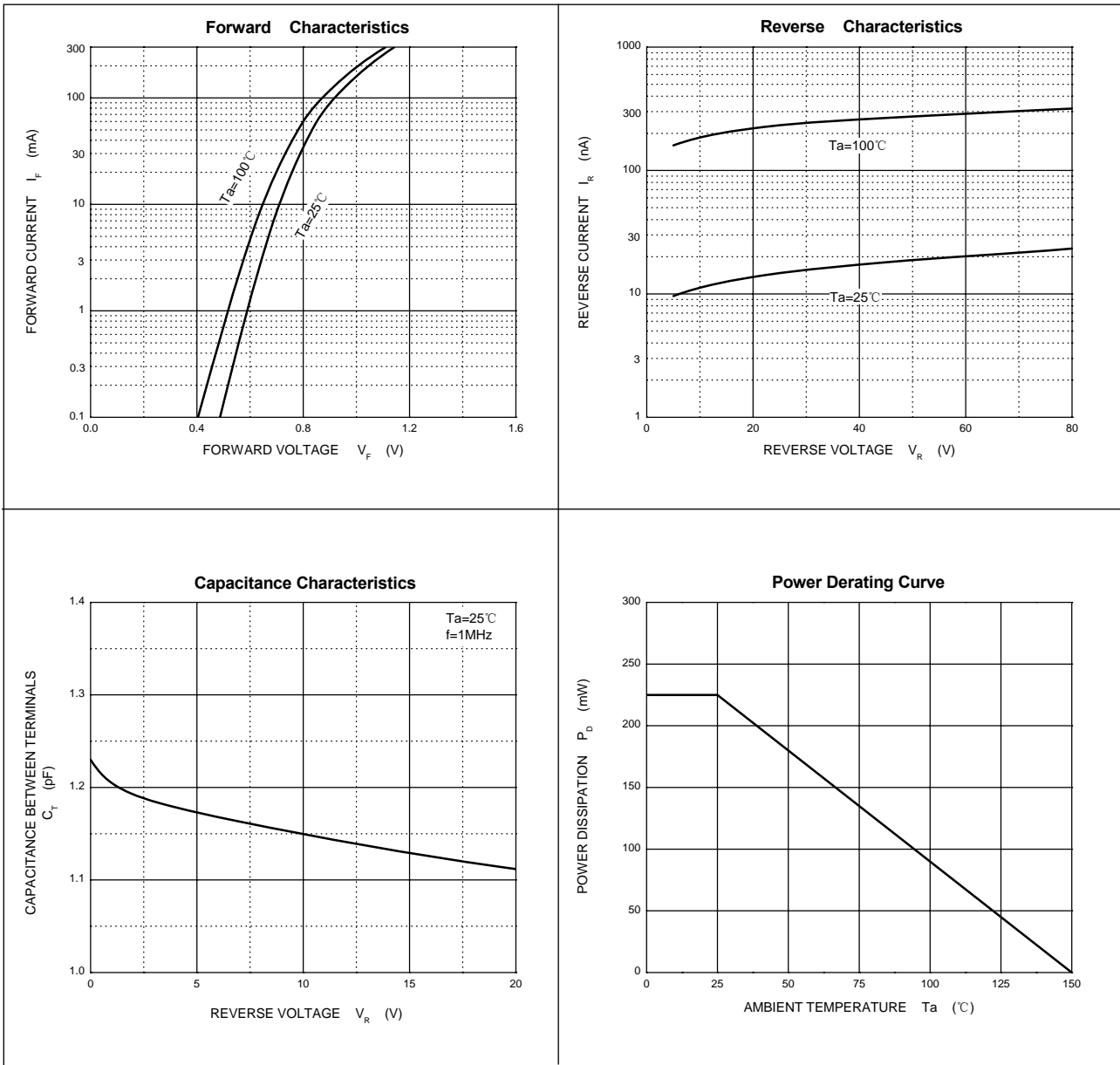
Parameter	Symbol	Limit	Unit
Reverse Voltage	$V_R$	70	V
Forward Current	$I_F$	200	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3ms$	$I_{FSM}$	2.0	A
Power Dissipation	$P_D$	225	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	556	°C/W
Junction Temperature	$T_J$	150	°C
Storage Temperature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

### Electrical Characteristics

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

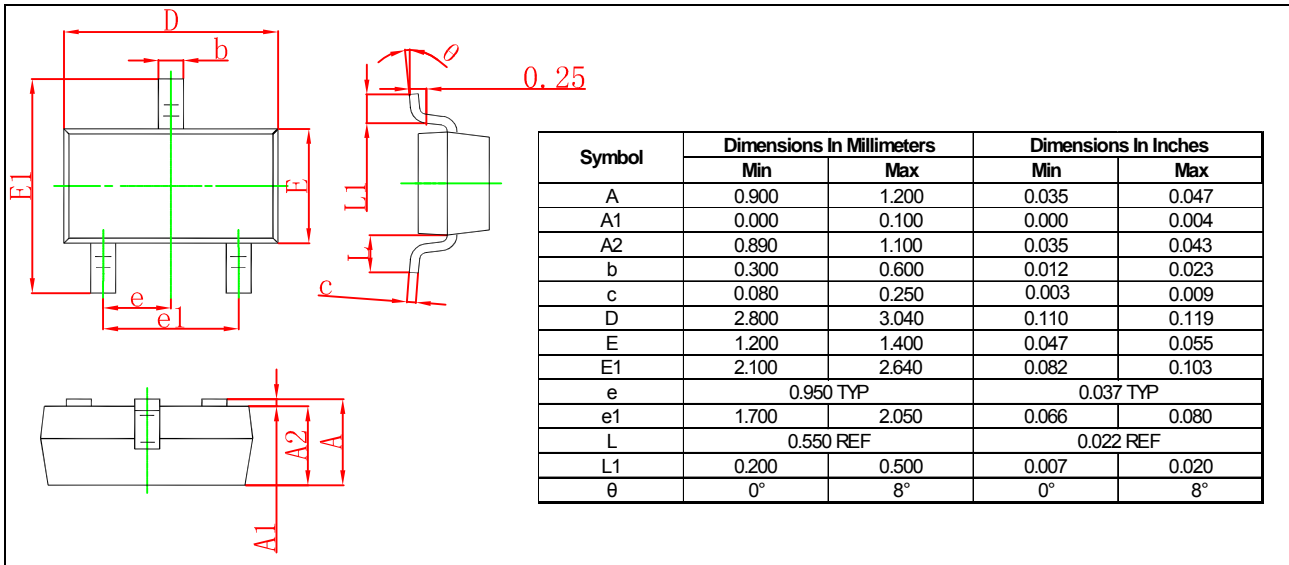
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_R$	70			V	$I_R=100\mu A$
Forward voltage	$V_{F1}$			0.715	V	$I_F=1mA$
	$V_{F2}$			0.855	V	$I_F=10mA$
	$V_{F3}$			1	V	$I_F=50mA$
	$V_{F4}$			1.25	V	$I_F=150mA$
Reverse current	$I_R$			2.5	$\mu A$	$V_R=70V$
Capacitance between terminals	$C_T$			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)

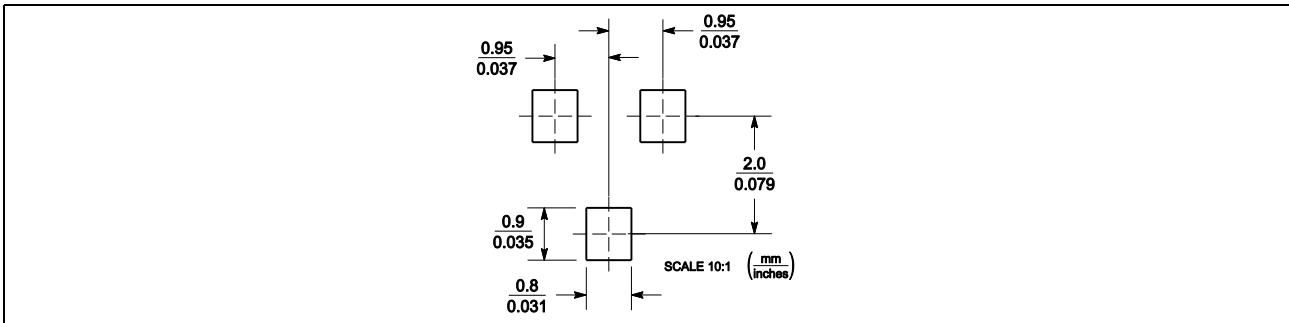


**Package Dimensions**

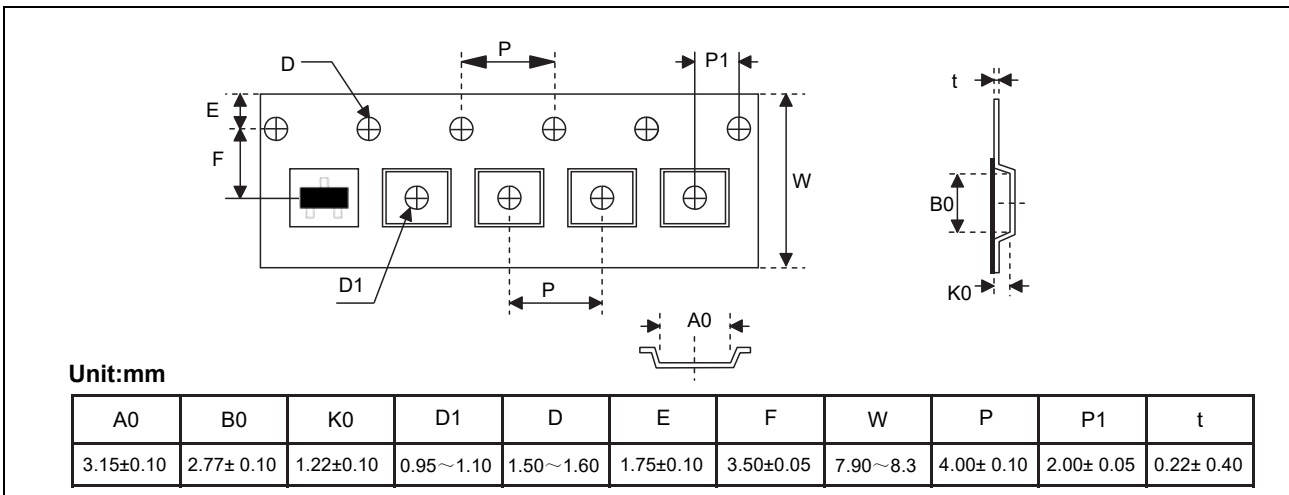
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**Pad Dimensions**



**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
1-Aug-2025	4.1	Increase MSL level

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