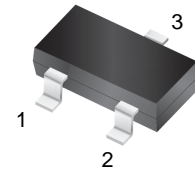


Schottky Barrier Diode in SOT-523

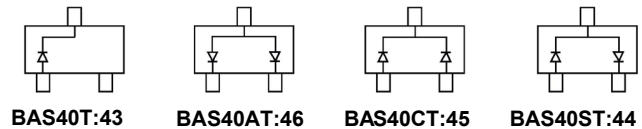
Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- Low Forward Voltage



Mechanical Data

- **Case:** SOT-523 (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

- High Speed Switching and Reverse Polarity Protection
- High Speed Rectifying Applications
- Consumer, Automotive and Telecommunication Industry

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

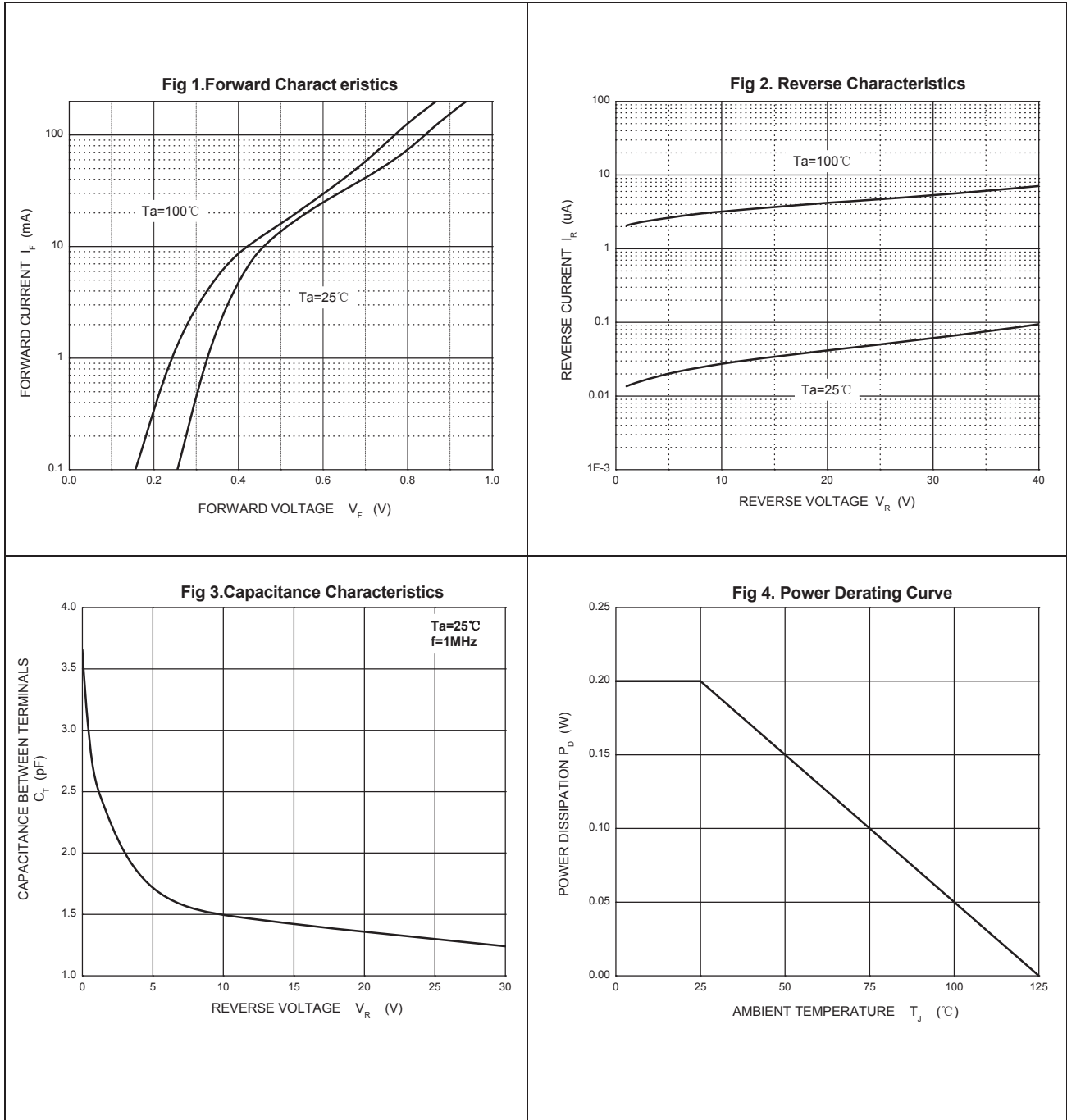
Parameter	Symbol	Limits	Unit
Peak Repetitive Peak reverse voltage Working Peak Reverse Voltage	V_{RRM} V_{RWM}	40	V
DC Reverse Voltage	V_R	40	V
Forward Continuous Current	I_F	200	mA
Forward surge current @t=8.3ms	I_{FSM}	600	mA
Power Dissipation	P_d	150	mW
Operating and Storage temperature	T_j, T_{STG}	-55-150	°C

Electrical Characteristics

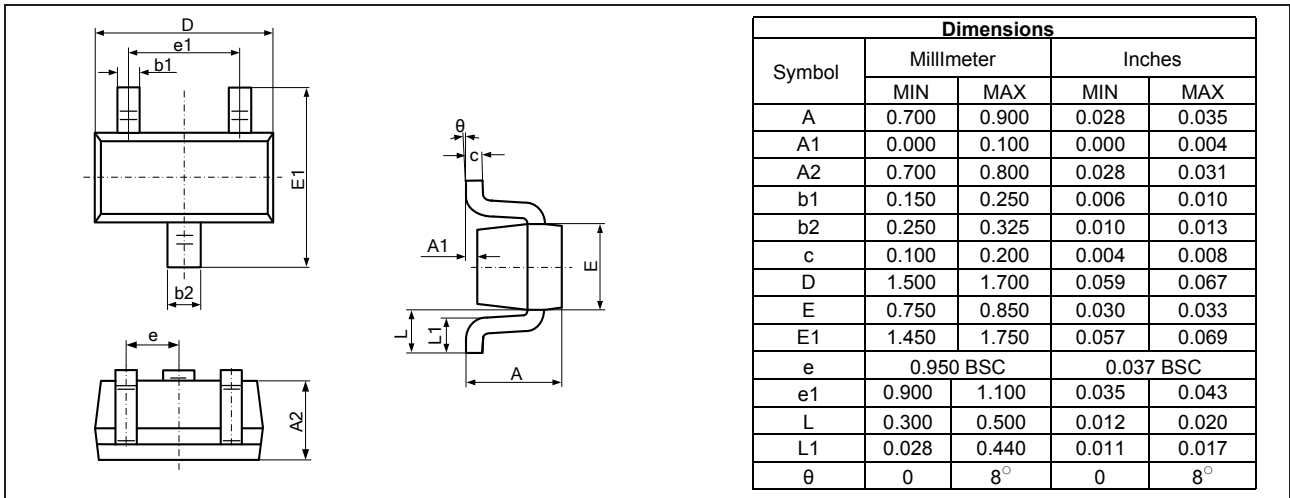
($T_A = 25\text{ °C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	40			V	$V_R=10\mu A$
Forward voltage	V_{F1}			0.38	V	$I_F=1mA$
	V_{F2}			1	V	$I_F=40mA$
Reverse current	I_R			0.2	μA	$V_R=30V$
Diode Capacitance	C_D			5	pF	$V_R=1V, f=1MHz$
Reverse Recovery Time	t_{rr}			5	ns	$I_F=I_R=10mA$ $I_{rr}=0.1I_R, R_L=100\Omega$

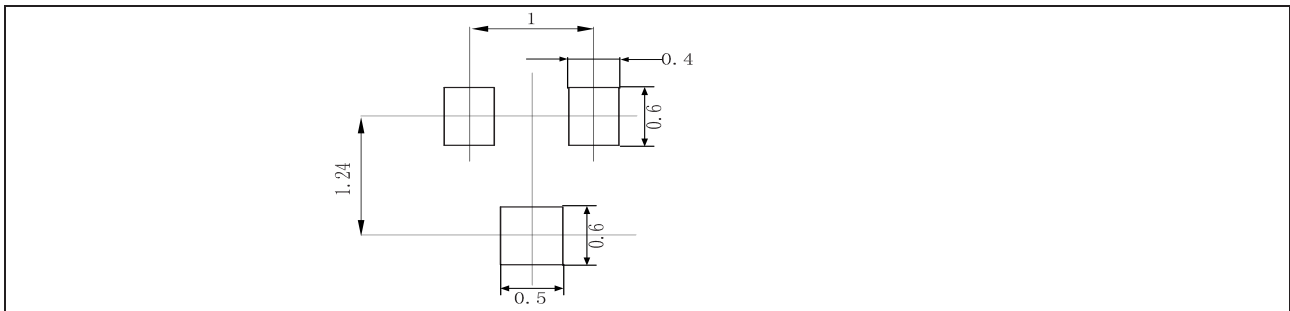
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



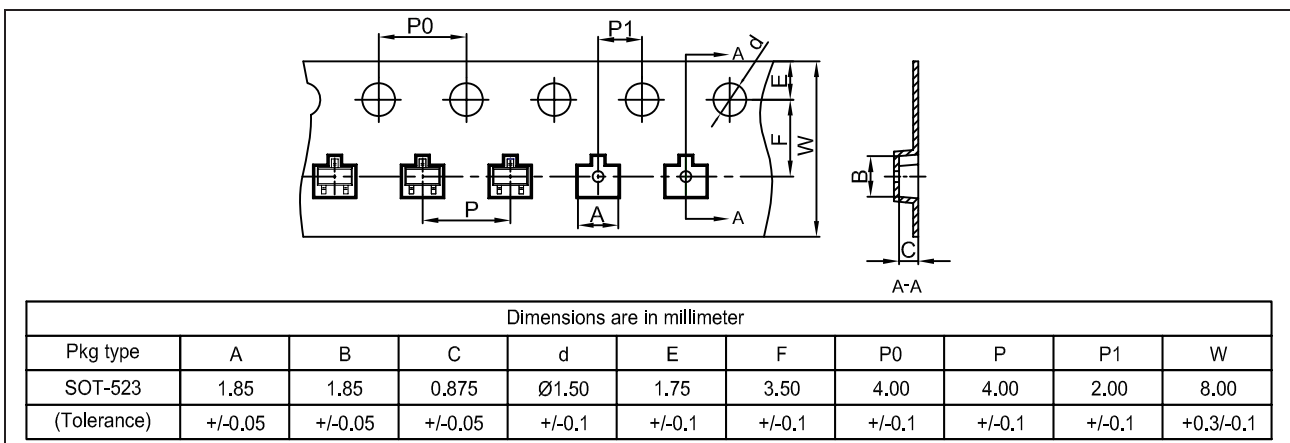
Package Dimensions



Pad Dimensions



Pad Dimensions



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
BAS40T/AT/CT/ST	SOT-523	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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