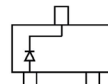
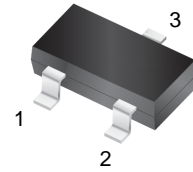
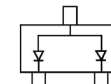
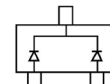
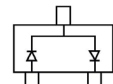


Schottky Barrier Diode in SOT-23

Features

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


BAS40

BAS40-06

BAS40-05

BAS40-04
Marking: 43
46
45
44

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

- 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

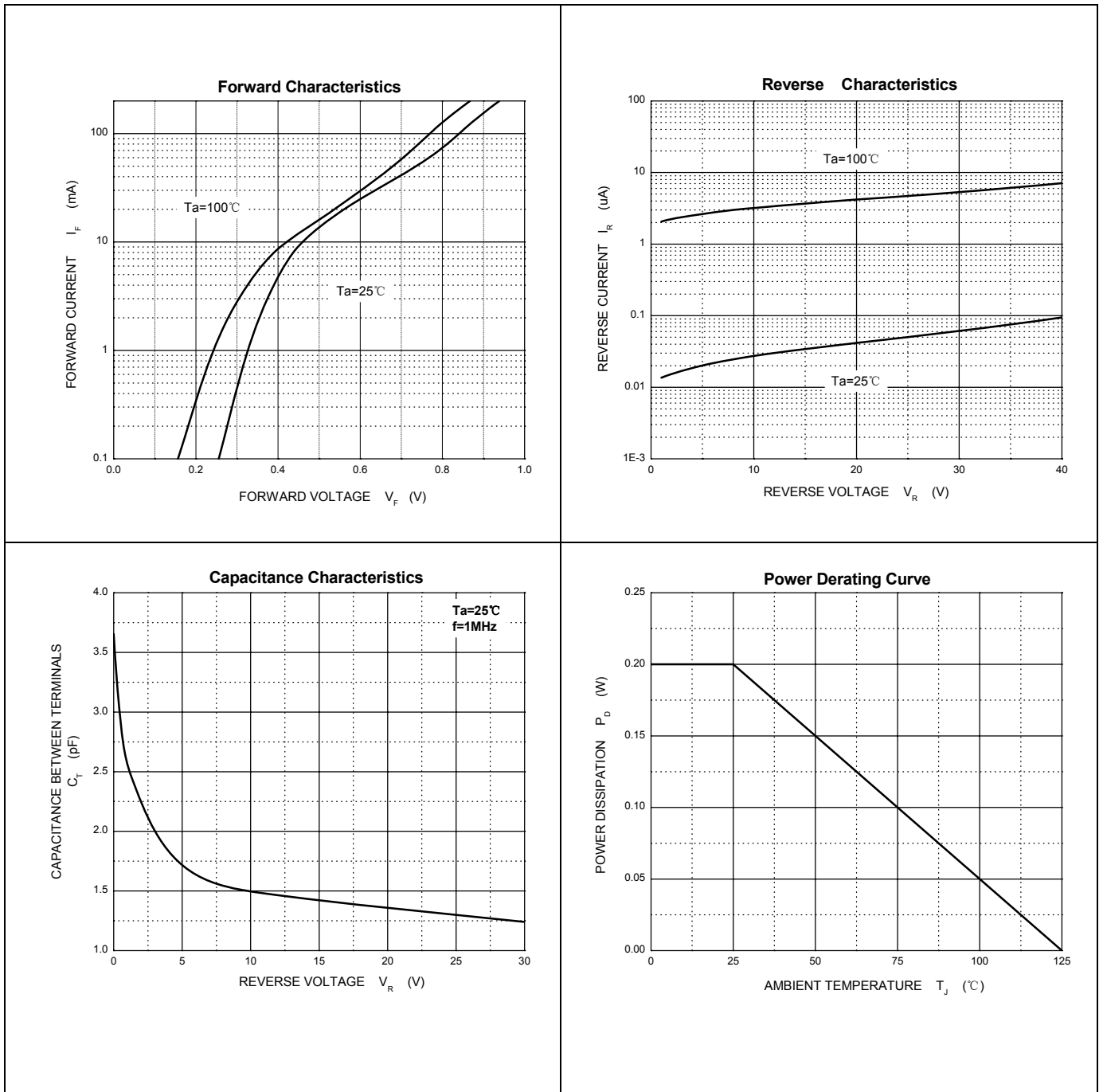
Parameter	Symbol	Limit	Unit
Peak repetitive peak reverse voltage	V_{RRM}	40	V
Working peak reverse voltage	V_{RWM}		
DC blocking voltage	V_R		
Forward continuous current	I_{FM}	200	mA
Power dissipation	P_D	200	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	500	°C/W
Junction temperature	T_J	125	°C
Storage temperature range	T_{STG}	-55~+150	°C

Electrical Characteristics

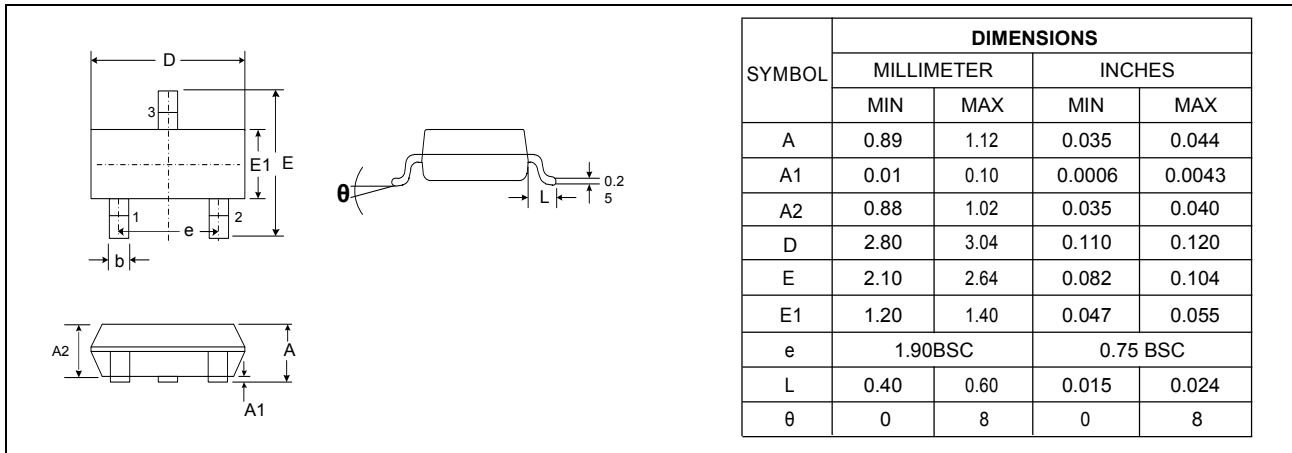
 ($T_A = 25\text{ °C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=10\mu A$	40		V
Reverse voltage leakage current	I_R	$V_R=30V$		200	nA
Forward voltage	V_F	$I_F=1mA$ $I_F=40mA$		380 1000	mV
Diode capacitance	C_D	$V_R=0, f=1MHz$		5	pF
Reverse recovery time	t_{rr}	$I_{rr}=1mA, I_R=I_F=10mA$ $R_L=100\Omega$		5	ns

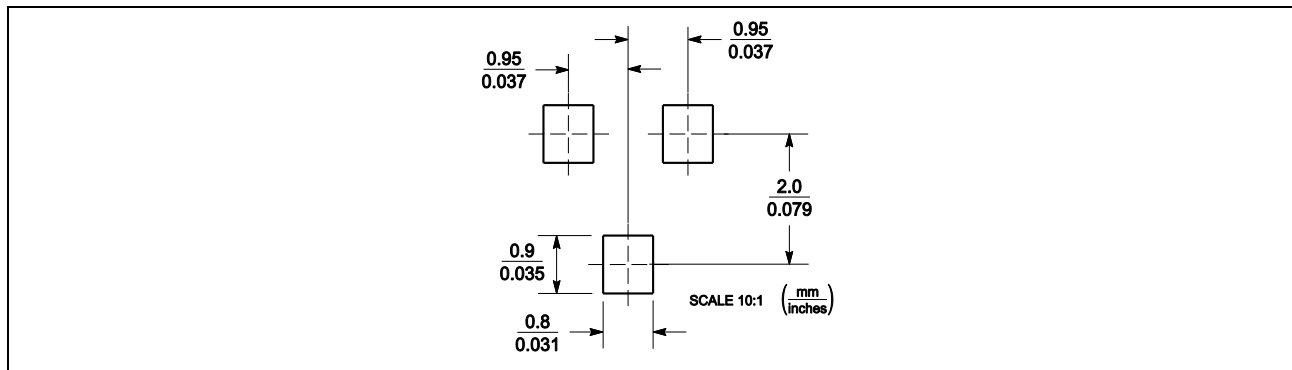
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



Pad Dimensions



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
BAS40 Series	SOT-23	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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