

BAS40/04/05/06

SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 40 Volt **CURRENT** 0.2 Ampere

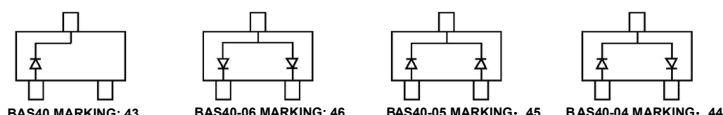
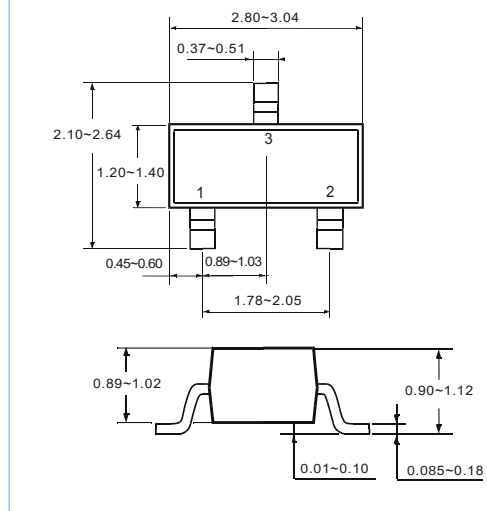
SOT-23 Unit:mm

FEATURES

- Extremely Fast Switching Speed
- Low Forward Voltage
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive 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 from Junction to Ambient	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55~+150	$^\circ\text{C}$

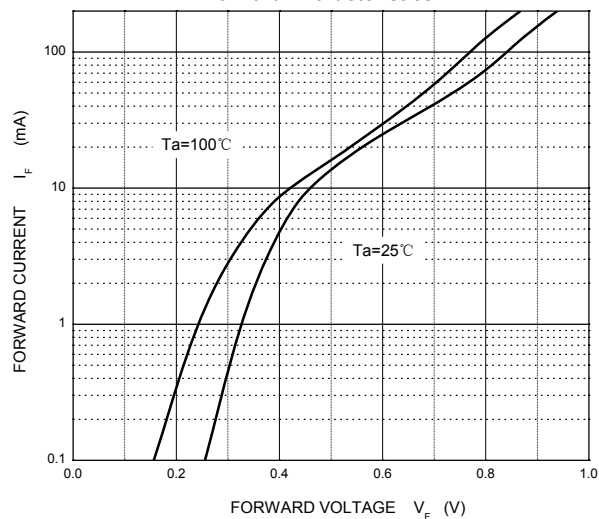
ELECTRICAL CHARACTERISTICS($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Min	Typ	Max	Unit	Test conditions
Reverse voltage	$V_{(BR)}$	40			V	$I_R=10\mu\text{A}$
Forward voltage	V_F			0.38	V	$I_F=1\text{mA}$
				1.0	V	$I_F=40\text{mA}$
Reverse current	I_R			200	nA	$V_R=30\text{V}$
Diode capacitance	C_D			5	pF	$V_R=1\text{V}, f=1\text{MHz}$
Reverse recovery time	t_{rr}			5	ns	$I_F=I_R=10\text{mA}, I_{RR}=1\text{mA}, R_L=100\Omega$

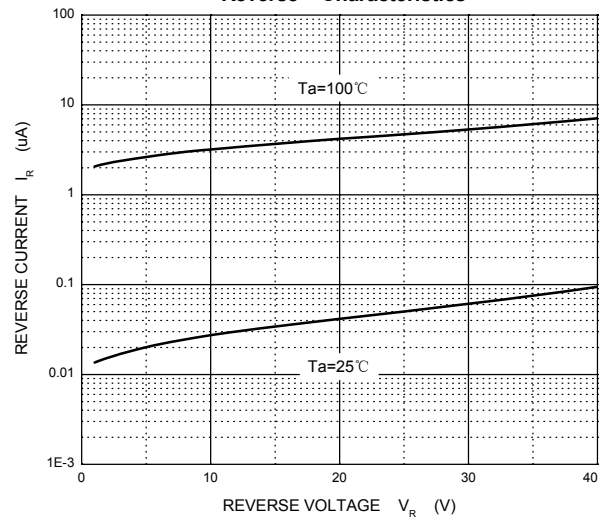
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Typical Characteristics

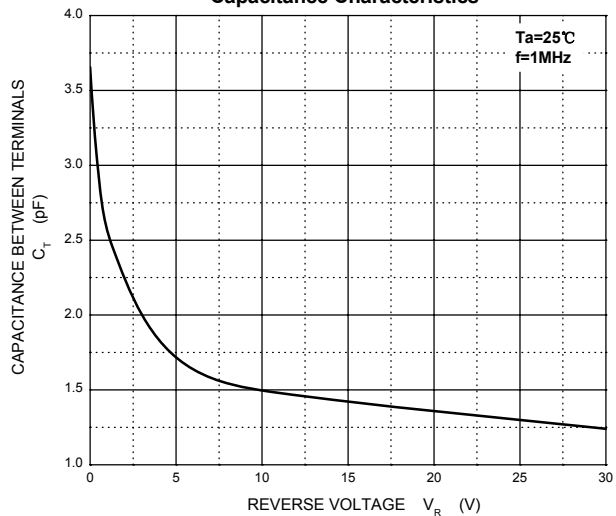
Forward Characteristics



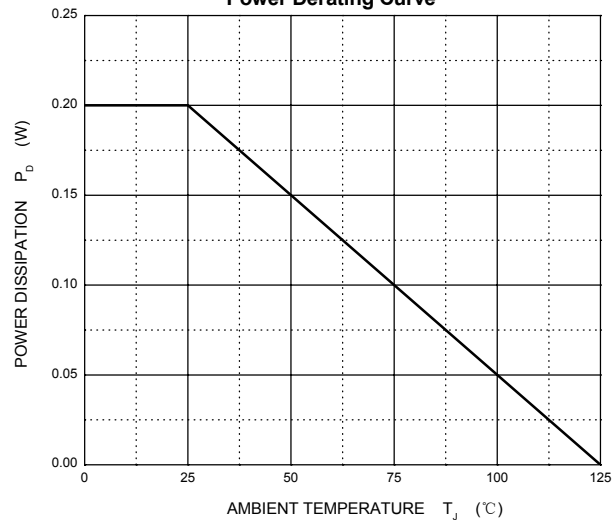
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

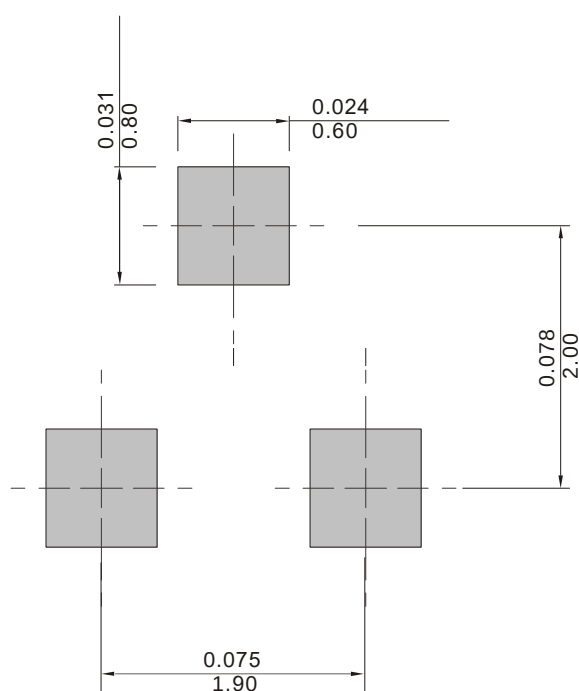


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MOUNTING PAD LAYOUT

SOT-23

Unit:Inch(mm)



ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
BAS40/04/05/06	SOT-23	7 Inch	3000