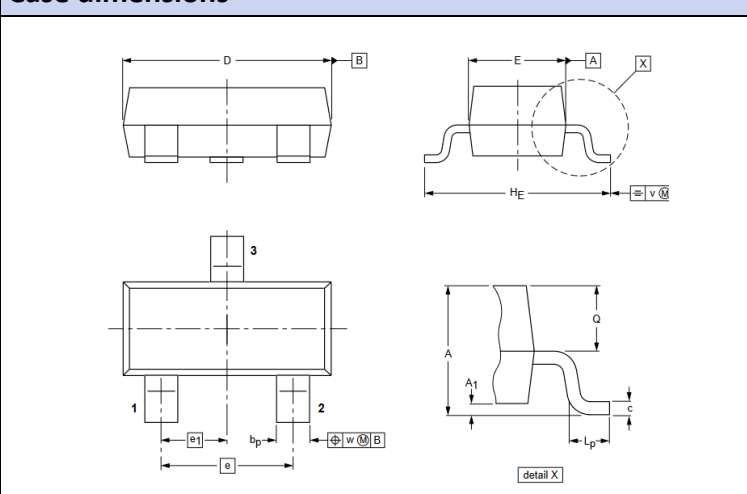


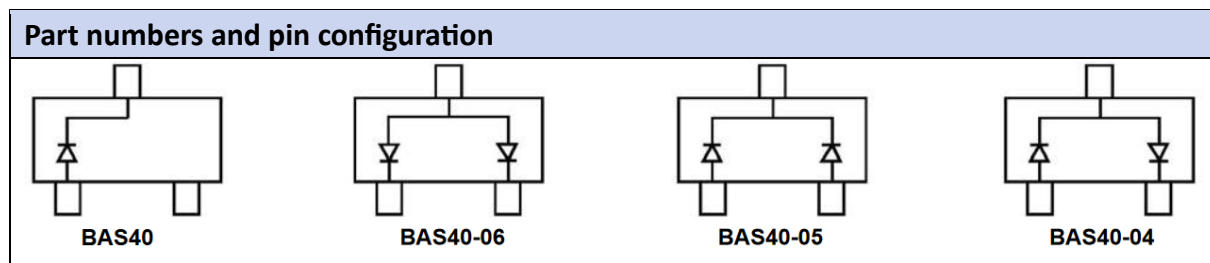
## SMD Schottky Barrier Diode

Primary characteristics			
Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	$V_{RRM}$	40	V
Continuous Forward Current	$I_{FM}$	200	mA
Power Dissipation	$P_D$	200	mW

### Features

- **SOT-23** case for easy automatic insertion.
- Pb-free and **RoHS** compliant
- Low forward voltage
- Fast switching

Case dimensions													
													
SOT-23 (TO-236AB)													
Unit	A	A <sub>1max</sub>	b <sub>p</sub>	c	D	E	e	e <sub>1</sub>	H <sub>E</sub>	L <sub>p</sub>	Q	v	w
mm	1.0 ±0.1	0.1	0.43 ±0.05	0.12 ±0.03	2.9 ±0.1	1.3 ±0.1	1.9	0.95	2.3 ±0.2	0.3 ±0.15	0.5 ±0.05	0.2	0.1

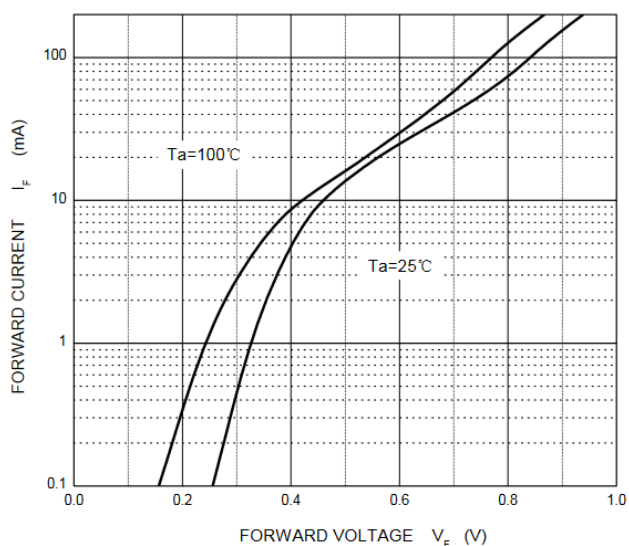


Maximum ratings and electrical characteristics (T <sub>a</sub> = 25°C)			
Characteristics	Symbol	Value Typ.	Unit
Peak repetitive reverse voltage	$V_{RRM}$	40	V
Working peak reverse voltage	$V_{RWM}$		
DC blocking voltage	$V_R$		
Forward continuous current	$I_{FM}$	200	mA
Average rectified output current	$I_o$	200	mA
Non-repetitive peak forward surge current @t=8.3ms	$I_{FSM}$	600	mA
Power dissipation	$P_D$	200	mW
Thermal resistance junction to ambient air	$R_{eJA}$	500	°C/W
Operating temperature range	$T_j$	-40 ~ 125	°C
Storage temperature range	$T_{STG}$	-55 ~ 150	°C

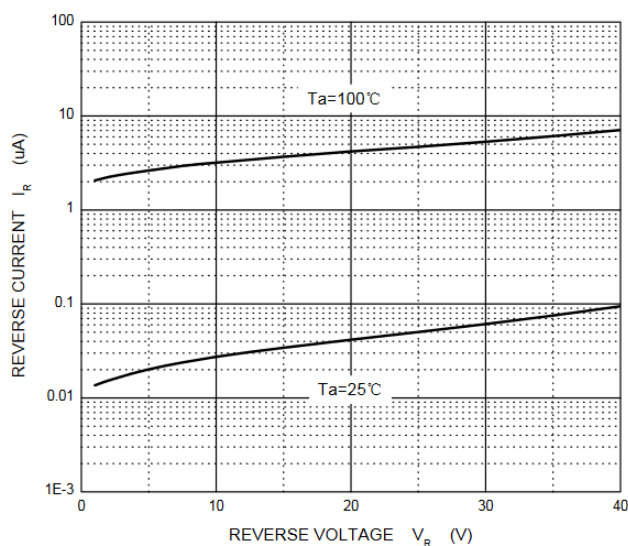
## Electrical characteristics (T<sub>a</sub>=25°C)

Parameter	Symbol	Test conditions	Value		Unit
			Min.	Max.	
Reverse breakdown voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =10μA	40	-	V
Reverse leakage current	I <sub>R</sub>	V <sub>R</sub> =30V	-	200	nA
Forward voltage <sup>1)</sup>	V <sub>F</sub>	I <sub>F</sub> = 1.0mA	-	380	mV
		I <sub>F</sub> = 40mA		1000	
Diode capacitance	C <sub>j</sub>	V <sub>R</sub> =0, f=1.0MHz	-	5.0	pF
Reverse recovery time <sup>2)</sup>	t <sub>rr</sub>	I <sub>rr</sub> =1.0mA, I <sub>R</sub> =I <sub>F</sub> =10mA, R <sub>L</sub> =100Ω	-	5.0	ns

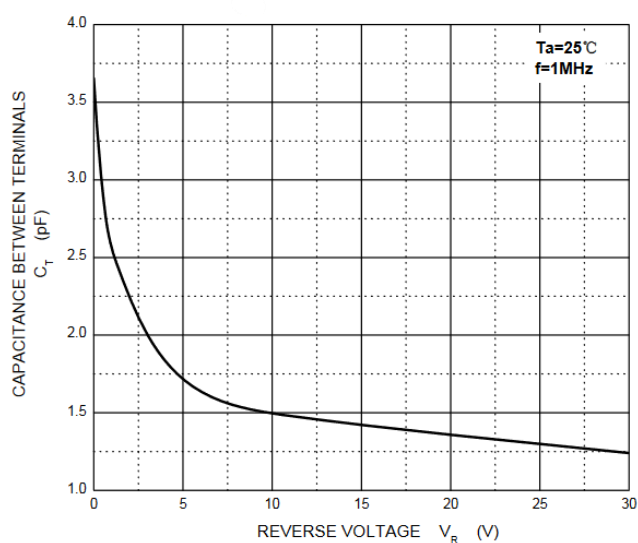
### Forward characteristics



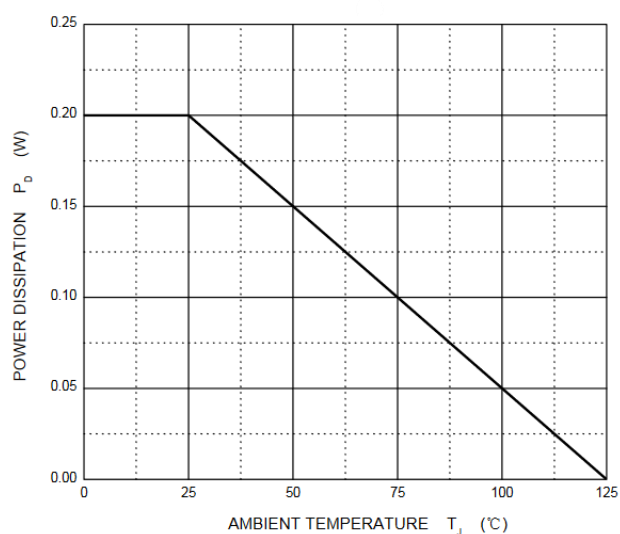
### Reverse characteristics

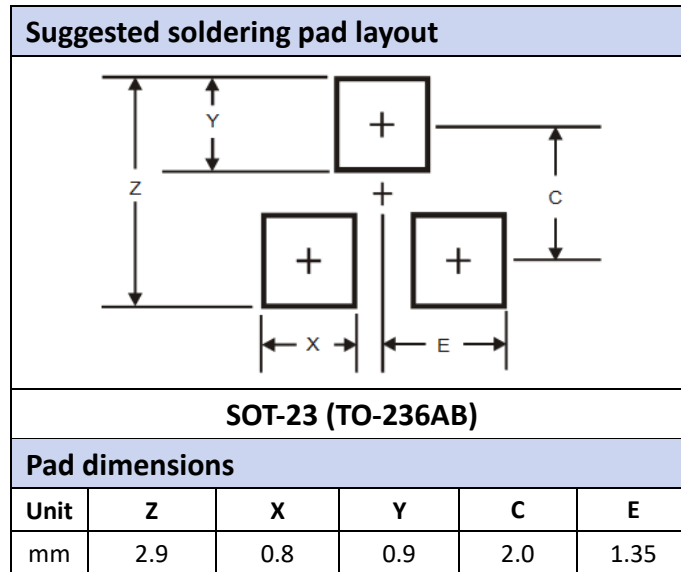


### Capacitance characteristics



### Power derating curve





Ordering information			
Part Number	Package	Shipping Quantity	Dimensions
BAS40, BAS40-04, BAS40-05, BAS40-06	SOT-23	3000 pcs / reel	---

## Disclaimer

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