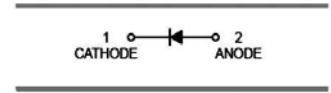


# Schottky Barrier Diode



## Features:

- Low Forward Drop Voltage
- Fast Switching
- Ultra-Small Surface Mount Package
- Available In Lead Free Version



SOD-323

## Applications:

Schottky barrier detector and switching diodes

## Max. Rating @ TA = 25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Peak repetitive peak reverse voltage Working peak DC reverse voltage	V <sub>RRM</sub> V <sub>RMS</sub> V <sub>R</sub>	30	V
RMS reverse voltage	V <sub>R(RMS)</sub>	21	V
Forward continuous current	I <sub>FM</sub>	200	mA
Repetitive peak forward current @ t < 1s	I <sub>FRM</sub>	500	mA
Peak Forward Surge Current @ <10ms	I <sub>FSM</sub>	4	A
Power dissipation	P <sub>D</sub>	200	mW
Thermal resistance, junction to ambient	R <sub>θJA</sub>	625	°C/W
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature range	T <sub>STG</sub>	-55 to +125	°C

## Electrical Characteristics @ TA = 25°C unless otherwise specified

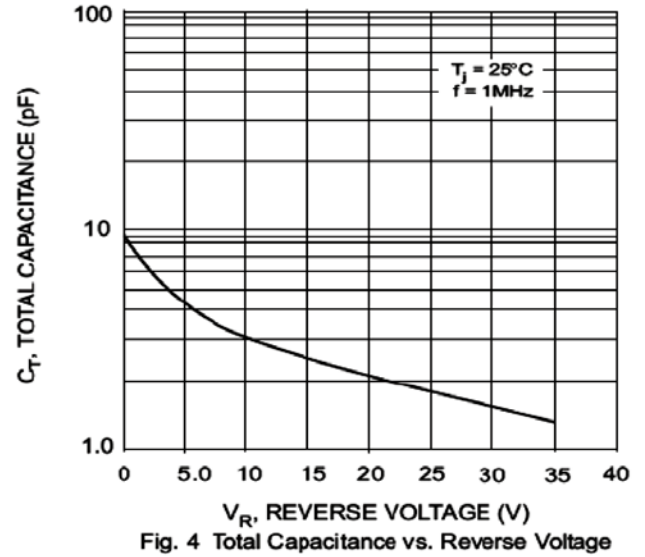
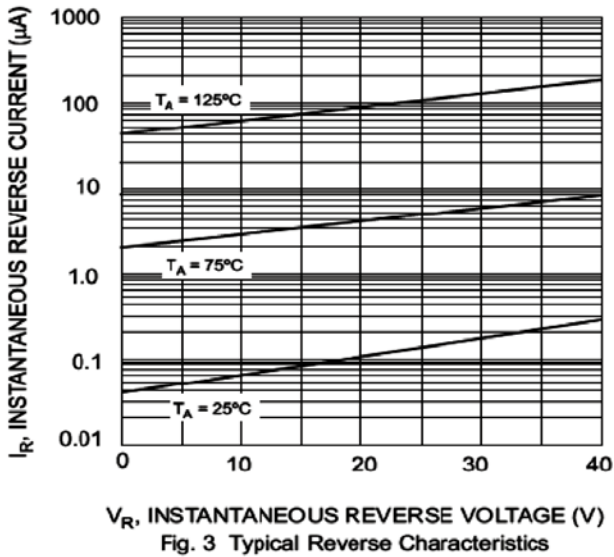
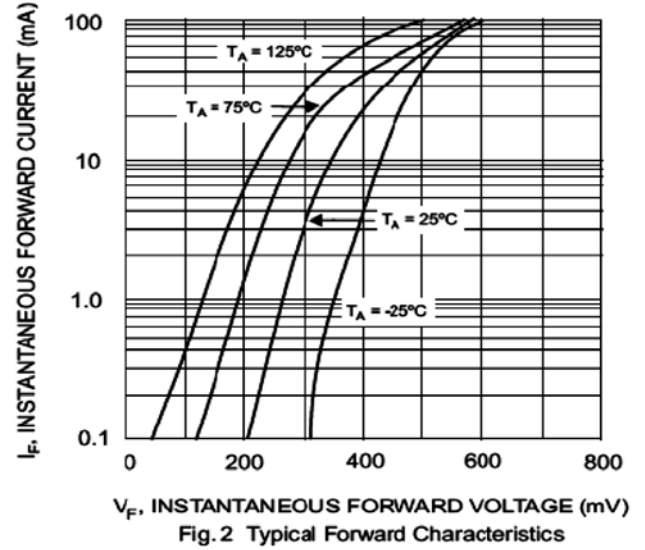
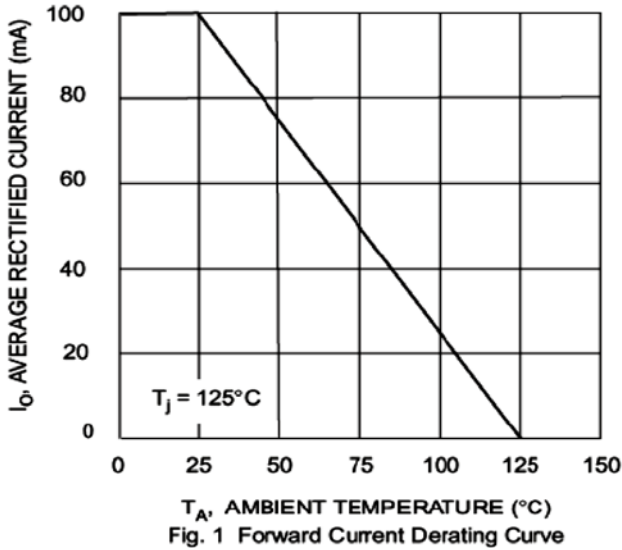
Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse breakdown voltage	V <sub>(BR)R</sub>	I <sub>R</sub> = 100µA	30	-	V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 200mA	-	1	V
	V <sub>F</sub>	I <sub>F</sub> = 10mA	-	0.4	V
	V <sub>F</sub>	I <sub>F</sub> = 50mA	-	0.65	V
	V <sub>F</sub>	I <sub>F</sub> = 2mA	-	0.33	V
	V <sub>F</sub>	I <sub>F</sub> = 15mA	-	0.45	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 25V	-	0.5	µA
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> = 10mA, I <sub>R</sub> = 10mA R <sub>L</sub> = 100Ω	-	5	ns
Capacitance between terminals	C <sub>T</sub>	V <sub>R</sub> = 1V, f = 1MHz	-	10	pF



# Schottky Barrier Diode



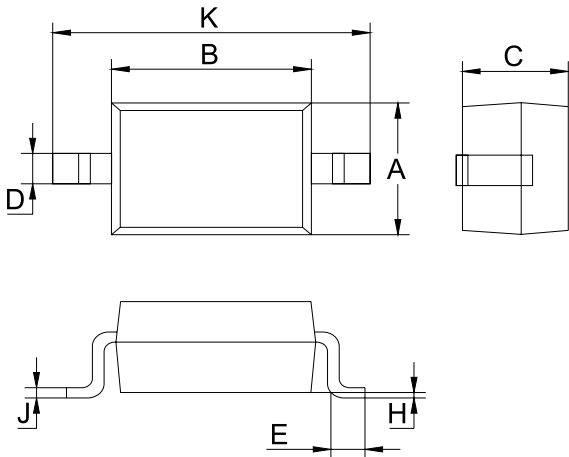
Typical Characteristics @  $T_A = 25^\circ\text{C}$  unless otherwise specified



# Schottky Barrier Diode

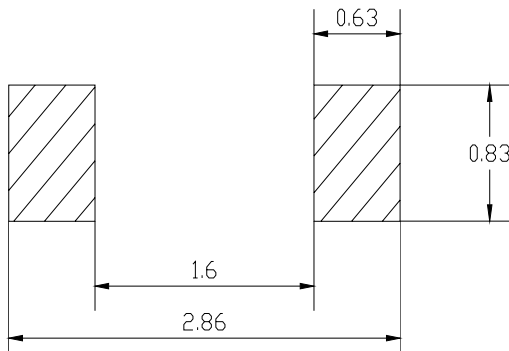


## Plastic surface mounted package



SOD-323		
Dim	Min	Max
A	1.275	1.325
B	1.675	1.725
C	0.9 Typical	
D	0.25	0.35
E	0.27	0.37
H	0.02	0.1
J	0.1 Typical	
K	2.6	2.7
All Dimensions in mm		

## Soldering Footprint



Unit : mm

## Package Information

Device	Package	Shipping
BAT43WS-7-F	SOD-323	3,000 / Tape & Reel

## Part Number Table

Description	Part Number
Schottky Barrier Diode	BAT43WS-7-F

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