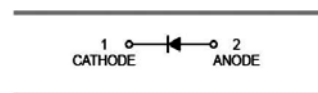


Schottky Barrier Diode



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

Parameter	Symbol	Limits	Unit
Peak repetitive peak reverse voltage Working peak DC reverse voltage	V_{RRM} V_{RMS} V_R	30	V
RMS reverse voltage	$V_{R(RMS)}$	21	V
Forward continuous current	I_{FM}	200	mA
Repetitive peak forward current @ $t < 1s$	I_{FRM}	500	mA
Peak Forward Surge Current @ $<10ms$	I_{FSM}	4	A
Power dissipation	P_D	200	mW
Thermal resistance, junction to ambient	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +125	$^\circ\text{C}$

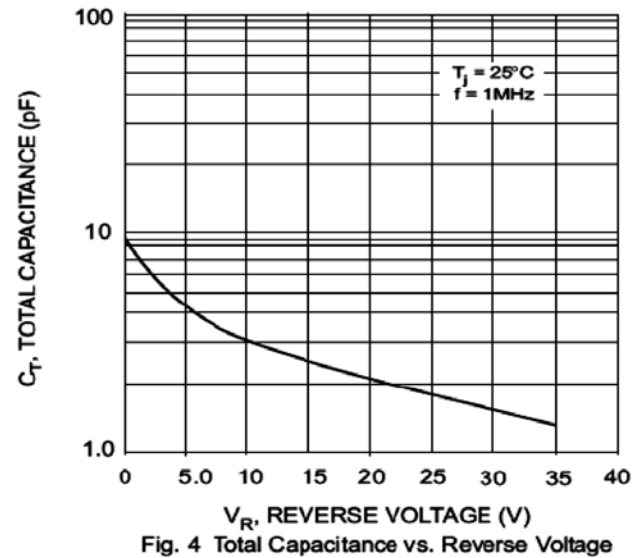
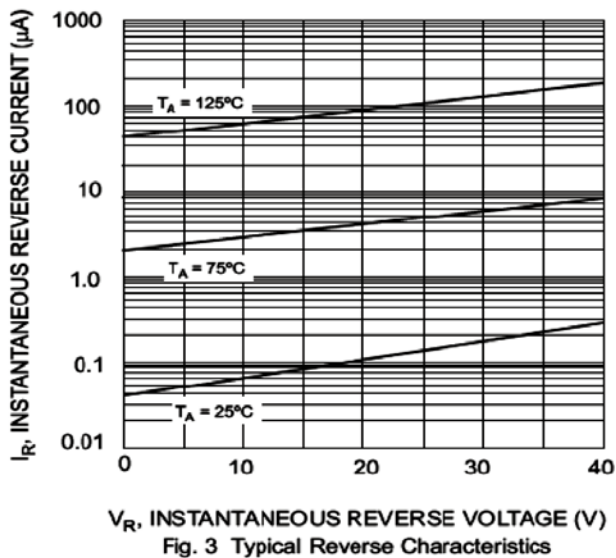
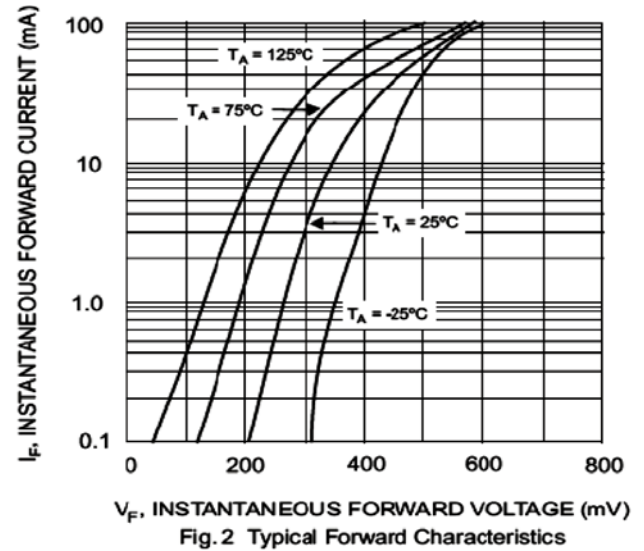
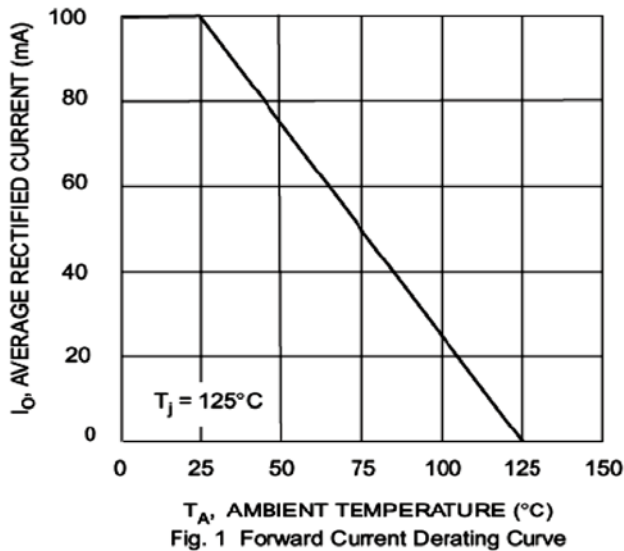
Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 100\mu\text{A}$	30	-	V
Forward voltage All types BAT42W BAT42W BAT43W BAT43W	V_F	$I_F = 200\text{mA}$	-	1	V
	V_F	$I_F = 10\text{mA}$	-	0.4	V
	V_F	$I_F = 50\text{mA}$	-	0.65	V
	V_F	$I_F = 2\text{mA}$	-	0.33	V
	V_F	$I_F = 15\text{mA}$	-	0.45	V
Reverse current	I_R	$V_R = 25\text{V}$	-	0.5	μA
Reverse recovery time	t_{rr}	$I_F = 10\text{mA}$, $I_R = 10\text{mA}$ $R_L = 100\Omega$	-	5	ns
Capacitance between terminals	C_T	$V_R = 1\text{V}$, $f = 1\text{MHz}$	-	10	pF

Schottky Barrier Diode



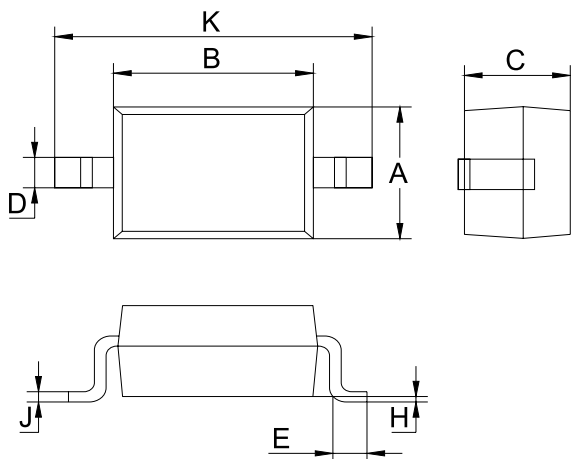
Typical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified



Schottky Barrier Diode

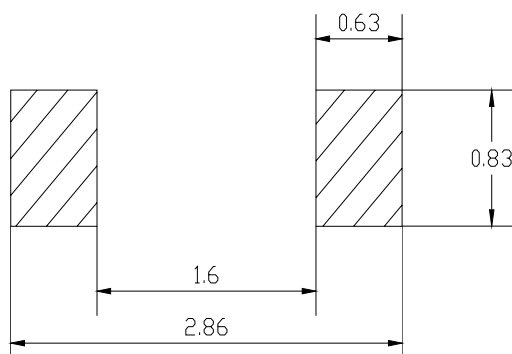


Plastic surface mounted package



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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