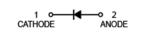
Schottky Barrier Diode





Features:

- · Low Turn-On Voltage
- · Fast Switching
- Ultra-Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection





Applications:

Schottky barrier detector and switching diode

SOD-323

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

Parameter	Symbol	Limits	Unit
Peak repetitive peak reverse voltage Working peak reverse voltage DC reverse Voltage	VRRM VRMS VR	30	V
RMS reverse voltage	VR(RMS)	21	V
Average rectified output current	lo	100	mA
Forward continuous current	lF	200	mA
Repetitive peak forward current	IFRМ	300	mA
Forward surge current @t<1.0s	IFSM	600	mA
Power dissipation	Po	200	mW
Thermal resistance, junction to ambient air	RθJA	500	°C/W
Junction temperature	Тј	125	°C
Storage temperature range	Тѕтс	-65 to +150	°C

Electrical Characteristics @ TA = 25°C unless otherwise specified

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse breakdown voltage	V(BR)R	IR = 100μA	30	-	V
Forward voltage	V _{F1}	IF = 0.1mA	-	240	mV
	VF2	IF = 1mA	-	320	mV
	V _{F3}	IF = 10mA	-	400	mV
	VF4	IF = 30mA	-	500	mV
	VF5	IF = 100mA	-	1,000	mV
Reverse leakage current	lr	V _R = 25V	-	2	μA
Reverse recovery time	trr	IF = 10mA, IR = 10mA to 1mA RL = 100Ω	-	5	ns
Junction capacitance	Сı	V _R = 1V, f = 1MHz	-	10	pF

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Schottky Barrier Diode



Typical Characteristics @ TA = 25°C unless otherwise specified

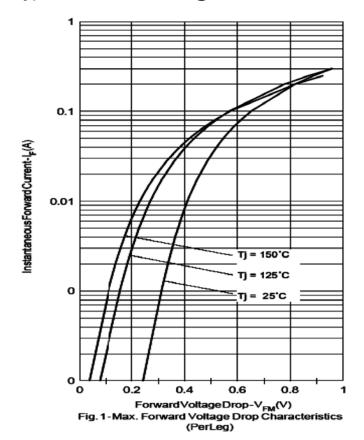


Fig.2-Typical Values Of Reverse Current Vs. Reverse Voltage (PerLeg)

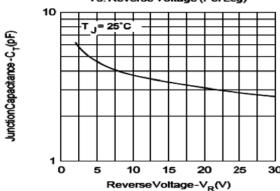
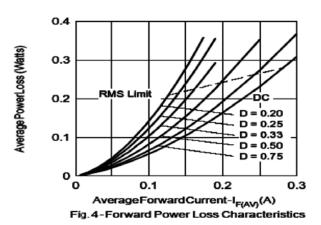
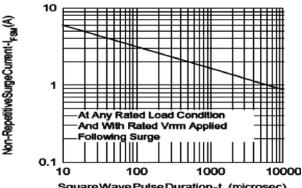


Fig.3-Typical Junction Capacitance
Vs. Reverse Voltage (PerLeg)



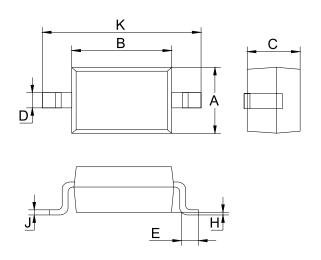


SquareWavePulseDuration-t_p (microsec) Fig.5-Max. Non-Repetitive Surge Current

Schottky Barrier Diode

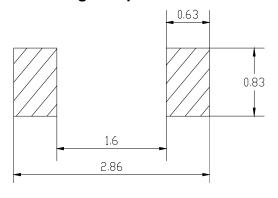


Plastic surface mounted package



SOD-323		
Dim	Min	Max
А	1.275	1.325
В	1.675	1.725
С	0.9 Typical	
D	0.25	0.35
E	0.27	0.37
Н	0.02	0.1
J	0.1 Typical	
К	2.6	2.7
All Dimensions in mm		

Soldering Footprint



Unit: mm

Package Information

Device	Package	Shipping
BAT54WS-7-F	SOD-323	3,000 / Tape & Reel

Part Number Table

Description	Part Number
Schottky Barrier Diode	BAT54WS-7-F

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