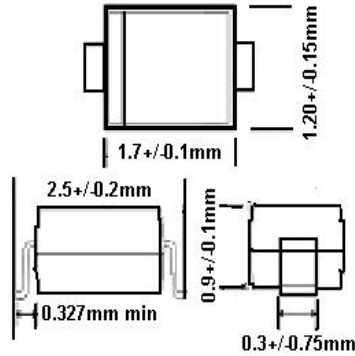




200mA SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Description

Mechanical Dimensions



SOD-323

Dimensions in mm

Feature

- * Low Turn-On Voltage
- * Fast Switching
- * Ultra Small Surface mount Package
- * ESD protection
- * Marking L9

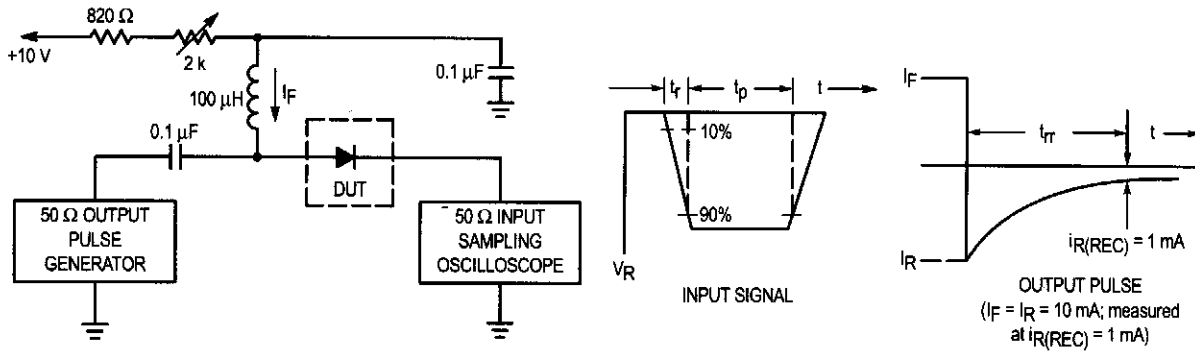
Max Ratings at Ta=25C Unless Otherwise Specified

Characteristic	Symbol	BAT54WS	Unit
Peak Repetitive Reverse Voltage	Vrrm	30	V
working Peak Reverse Voltage	Vrwm	30	V
DC Blocking Voltage	Vdc	30	V
RMS Reverse Voltage	Vr(rms)	21	V
Power Dissipation	Pd	200	mW
Average Rectified Forward Current	Io	100	mA
Forward Continuous Current	If	200	mA
Repetitive Peak Forward Surge Current	Ifrm	300	mA
Forward Surge Current @t<1.0s	Ifsm	600	mA
Operating & storage Temp. Range	Tj/Ts	-65~+125	C
Max Forward Voltage	Vf	240 @ 0.1mA, 400 @ 10mA, 500 @ 30mA, 1000 @100mA	mV
Reverse Leakage Current	Ir	2	uA
Reverse Recovery Time @ If=10mA, Ir=10~1.0mA, RL=100ohm	Trr	5	nS
Typical Junction Capacitance Vr=1.0V, f=1.0MHz	Cj	10	pF
Thermal Resistance Junction to Ambient Air	Rthja	625	K/W

Note: 1 Valid provided that leads are kept at ambient temperature.

2. T<200us, duty cycle<2%

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- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10 mA.
2. Input pulse is adjusted so $I_{R(\text{peak})}$ is equal to 10 mA.
3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

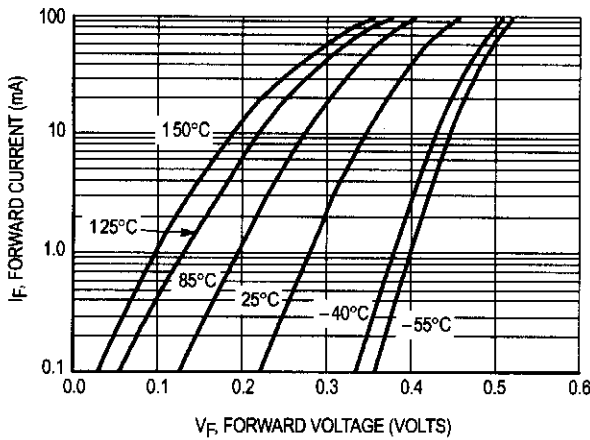


Figure 2. Forward Voltage

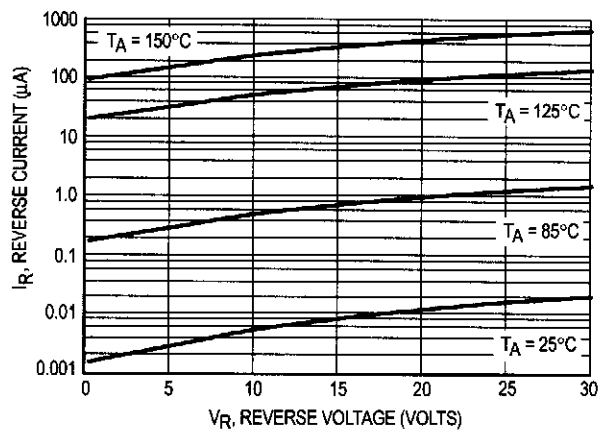


Figure 3. Leakage Current

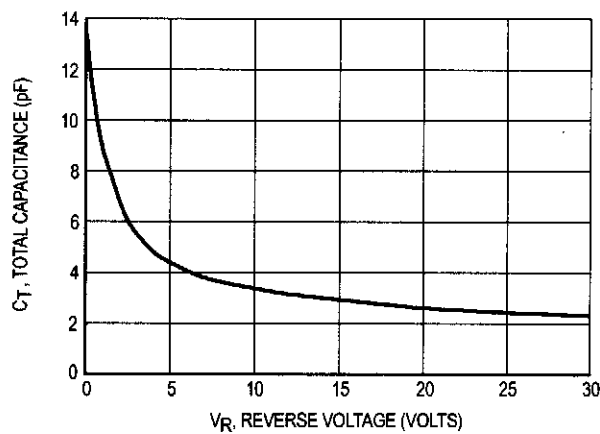


Figure 4. Total Capacitance