

**BAT54WS** Schottky Diodes

SOD-323

**FEATURES**

- Extremely Fast Switching Speed
- Low forward voltage

Maximum Ratings @T_A=25°C

Parameter Symbol		Limits	Unit
Non-Repetitive Peak reverse voltage	V _{RM}	30	V
DC Blocking Voltage	V _R	21	V
Average Rectified Output Current	I _O	100	mA
Forward continuous Current	I _F	200	mA
Repetitive peak Forward Current	I _{FRM}	300	mA
Forward Surge Current	I _{FSM}	600	mA
Power Dissipation	P _d	200	mW
Thermal resistance,junction to ambient air	R _{θJA}	625	°C/W
Junction temperature	T _J	125	°C
Storage temperature range	T _{STG}	-65-150	°C

Electrical Characteristics @T_A=25°C

Parameter	Symbol	Conditions	Min. T	yp.	Max.	Unit
Reverse Breakdown Voltage	V _{(BR)R}	I _R =100μA	30			V
Forward voltage	V _{F1}	I _F =0.1mA			240	mV
	V _{F2}	I _F =1.0mA			320	mV
	V _{F3}	I _F =10mA			400	mV
	V _{F4}	I _F =30mA			500	mV
	V _{F5}	I _F =100mA			1000	mV
Reverse current	I _R	V _R =25V			2.0	uA
Reverse recovery time	t _{rr}	I _F =10mA, I _R =10mA to 1mA , R _L =100 Ω			5.0	ns
Capacitance between terminals	C _T	V _R =1V,f=1MHz			10	pF

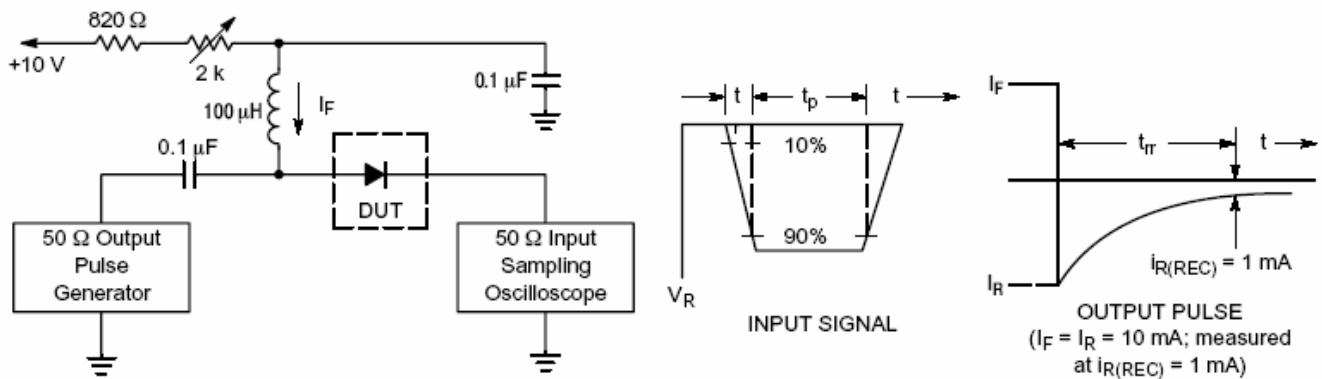


Figure 1. Recovery Time Equivalent Test Circuit

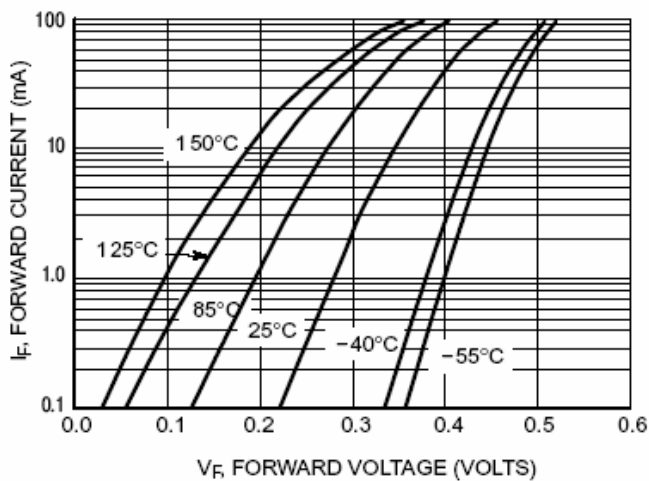


Figure 2. Forward Voltage

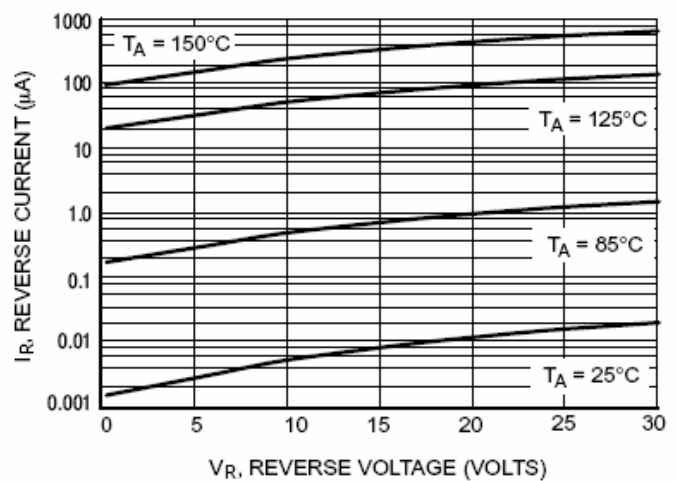


Figure 3. Leakage Current

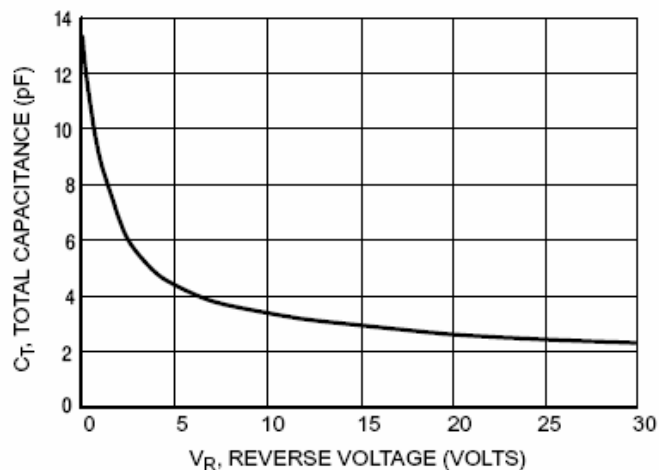


Figure 4. Total Capacitance