



BAT54W Series

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

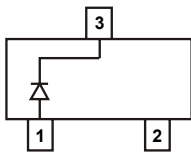
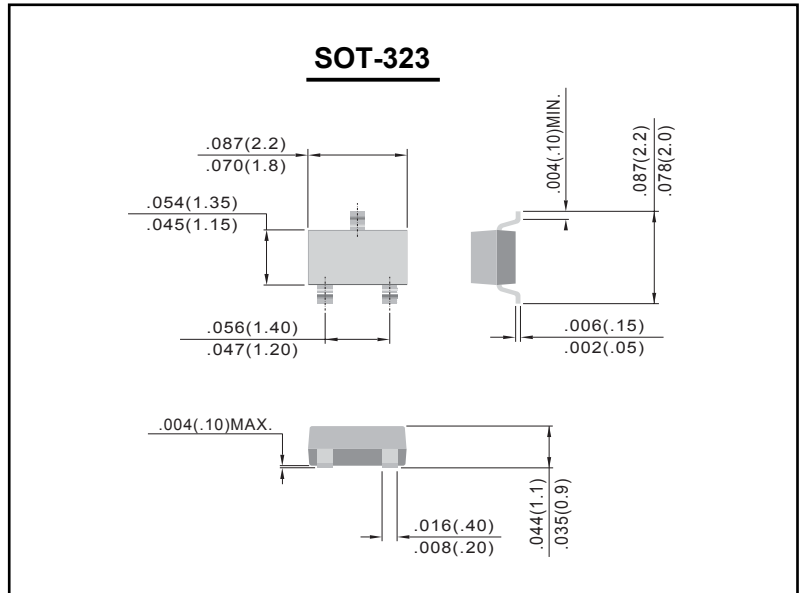
Reverse Voltage - 30 Volts Forward Current - 200 mAmpere

FEATURES

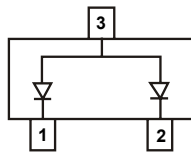
- Low Turn-on Voltage
- Fast Switching
- Ultra-small surface mount package.
- PN Junction Guard Ring for Transient and ESD Protection

MECHANICAL DATA

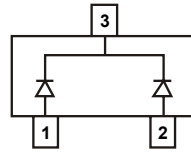
- Case: SOT-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagrams Below
- Weight: 0.0048 grams (approx.)



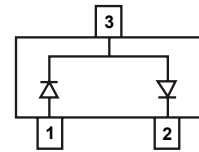
BAT54W Marking : L4



BAT54AW Marking : L42



BAT54CW Marking : L43



BAT54SW Marking : L44

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. For capacitive load, derate current by 20%.

Parameter	Symbol	BAT54W	BAT54AW	BAT54CW	BAT54SW	Units
Marking code	-	L4	L42	L43	L44	-
Peak Repetitive Reverse Voltage	V_{RRM}	30				V
Maximum Average Forward Current at $T_A=75^\circ\text{C}$	$I_{F(AV)}$	0.2				A
Peak Forward Surge Current, 1.0s (JEDEC method)	I_{FSM}	0.6				A
Maximum Instantaneous Forward Voltage @ $I_F=1\text{mA}$ @ $I_F=100\text{mA}$	V_F	0.32 1.0				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $V_R=25\text{V}$	I_R	2.0				μA
Junction Capacitance :at $V_R=1\text{V}$	C_J	10				pF
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	635				$^\circ\text{C}/\text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 TO +125				$^\circ\text{C}$
Circuit Figure	-	Single	Common Anode	Common Cathode	Series	-



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RATINGS AND CHARACTERISTIC CURVES

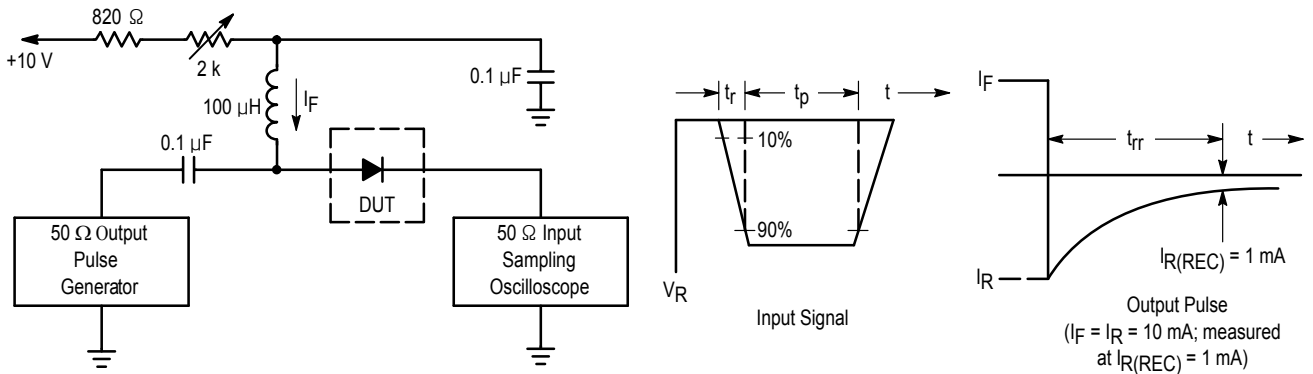


Figure 1. Recovery Time Equivalent Test Circuit

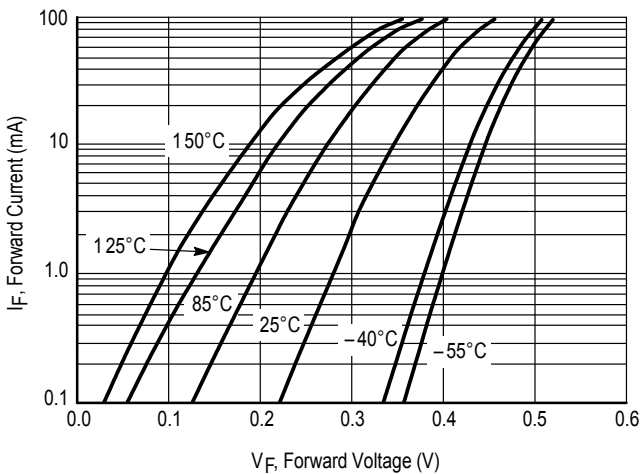


Figure 2. Forward Voltage

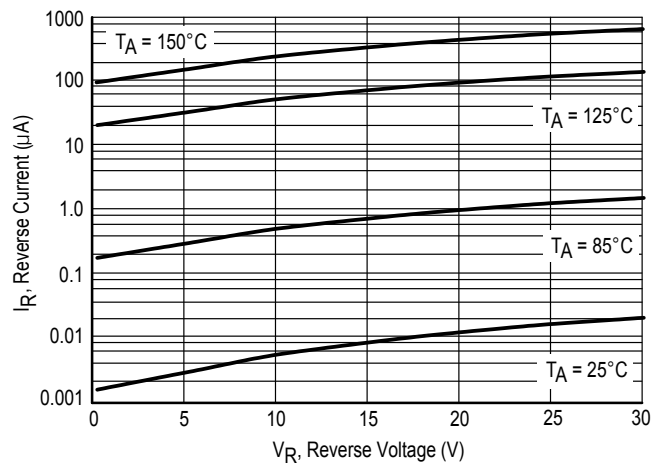


Figure 3. Leakage Current

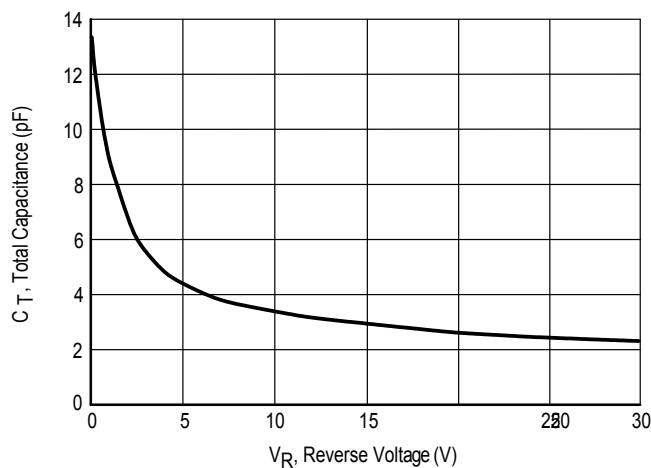


Figure 4. Total Capacitance