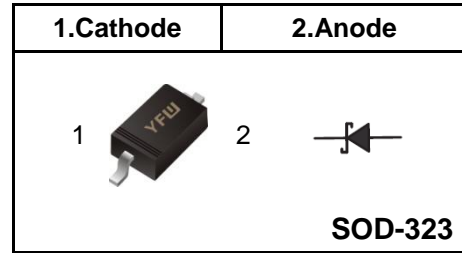


■ Schottky Diode

**Pinning**



**Features**

- Extremely Fast Switching Speed
- Low Forward Voltage
- Pb-Free Package is Available

**Marking Code**

<b>BAT54H</b>	<b>JV</b>
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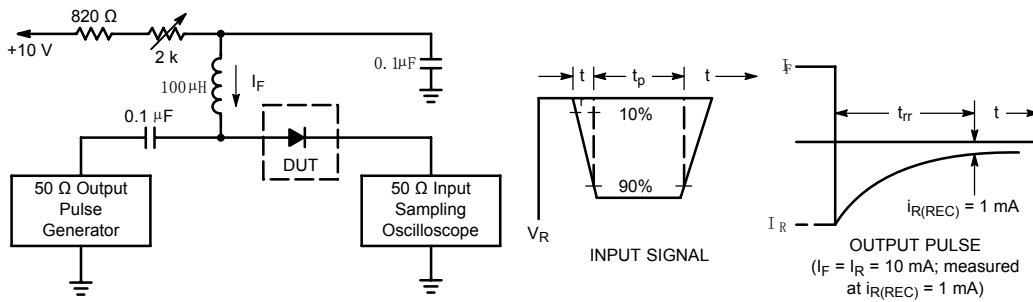
**Absolute Maximum Ratings** Ta = 25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	V <sub>RM</sub>	30	V
Forward Current	I <sub>F</sub>	200	mA
Repetitive Peak Forward Current	I <sub>FRM</sub>	300	
Non-Repetitive Peak Forward Current (t < 1s)	I <sub>FSM</sub>	600	
Power Dissipation	P <sub>d</sub>	200	mW
-Derate above 25°C		1.57	mW/°C
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	635	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-55 to 150	

**Electrical Characteristics** Ta = 25°C

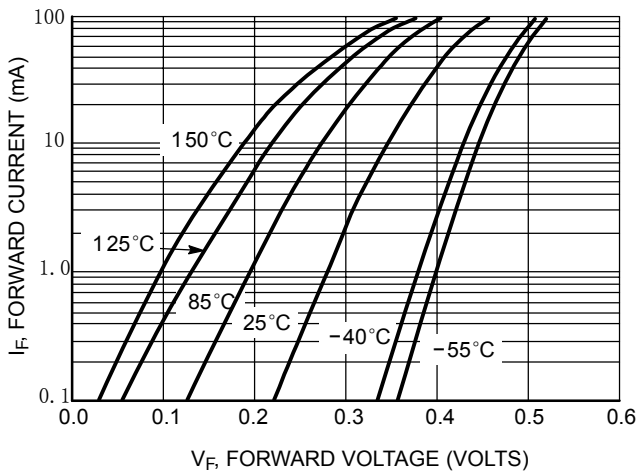
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V <sub>R</sub>	I <sub>R</sub> = 10 uA	30			V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 0.1 mA			0.24	
		I <sub>F</sub> = 1 mA			0.32	
		I <sub>F</sub> = 10 mA			0.4	
		I <sub>F</sub> = 30 mA			0.5	
		I <sub>F</sub> = 100 mA			0.8	
Reverse voltage leakage current	I <sub>R</sub>	V <sub>R</sub> = 25 V			2	uA
Junction capacitance	C <sub>j</sub>	V <sub>R</sub> = 1 V, f= 1 MHz			10	pF
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>R(REC)</sub> = 1mA			5	ns

**Typical Characteristics**

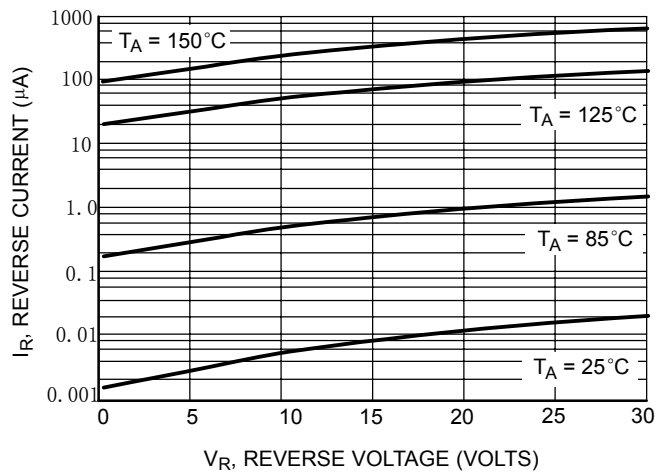


Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current ( $I_F$ ) of 10 mA.  
2. Input pulse is adjusted so  $I_{R(\text{peak})}$  is equal to 10 mA.  
3.  $t_p \gg t_{rr}$

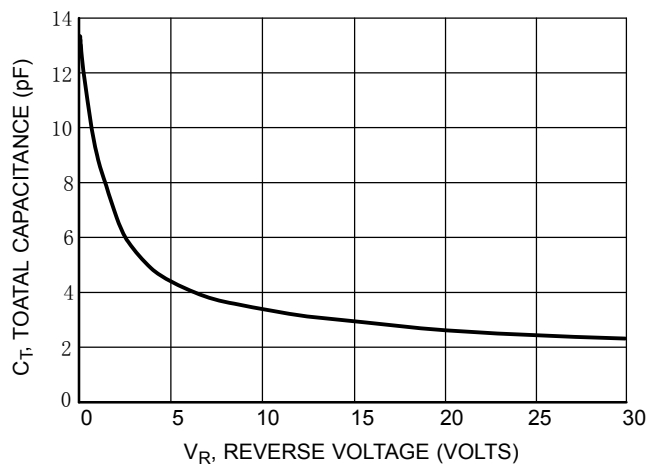
**Figure 1. Recovery Time Equivalent Test Circuit**



**Figure 2. Forward Voltage**



**Figure 3. Leakage Current**



**Figure 4. Total Capacitance**

**Ordering information**

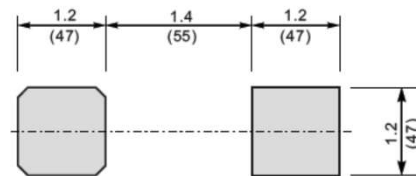
Package	Packing Description	Packing Quantity
SOD-323	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

**Package Dimensions**

**SOD-323**

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
C	0.08	0.15	3.1	5.9
D	1.2	1.4	47	55
E	1.4	1.8	63	70
E1	2.55	2.75	100	108
b	0.25	0.4	9.8	16
L1	0.2	0.45	7.9	16
A1	-	0.2	-	8
∠	9°			

**The recommended mounting pad size**



Unit:  $\frac{\text{mm}}{\text{mil}}$

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