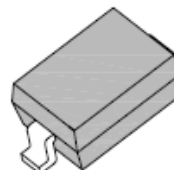


Two Terminals Schottky Barrier Diode

Features

- Low turn-on voltage
- Fast switching
- Very Small Conduction Losses
- RoHS compliant



SOD-323



Mechanical Data

Case:	SOD-323, plastic case
Terminals:	Solderable per MIL-STD-750, Method 2026
Polarity:	Color band denotes the cathode end
Weight:	Approx. 0.0041 grams

Maximum Ratings ($T_J=125^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	BAT54WS3	Unit	Conditions
	Marking Code	JV / L4		
VRRM	Repetitive Peak Reverse Voltage	30	V	
IF(AV)	Average Forward Current	200	mA	
IFSM	Repetitive Peak Surge Current	400	mA	Rated VR, Square Wave, 20KHz
RthJA	Thermal Resistance, Junction to Ambient	635	$^{\circ}\text{C/W}$	
Pd	Power Dissipation	200	mW	
TJ	Junction Temperature	125	$^{\circ}\text{C}$	
TSTG	Storage Temperature Range	-55 to +125	$^{\circ}\text{C}$	

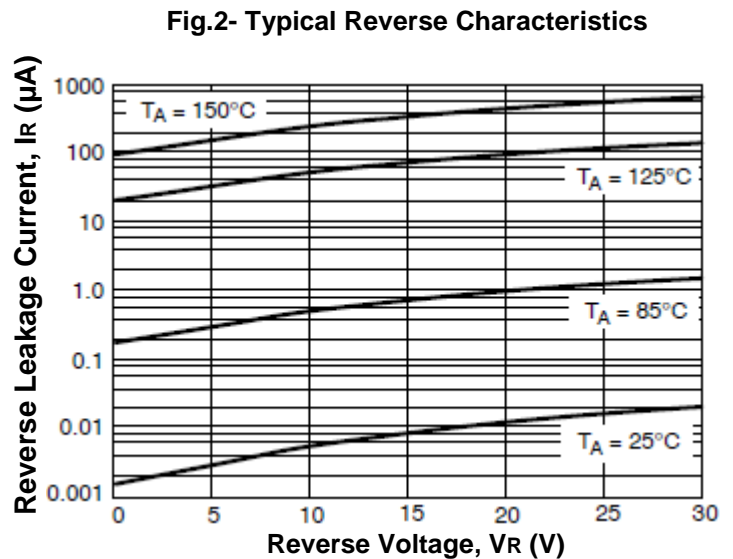
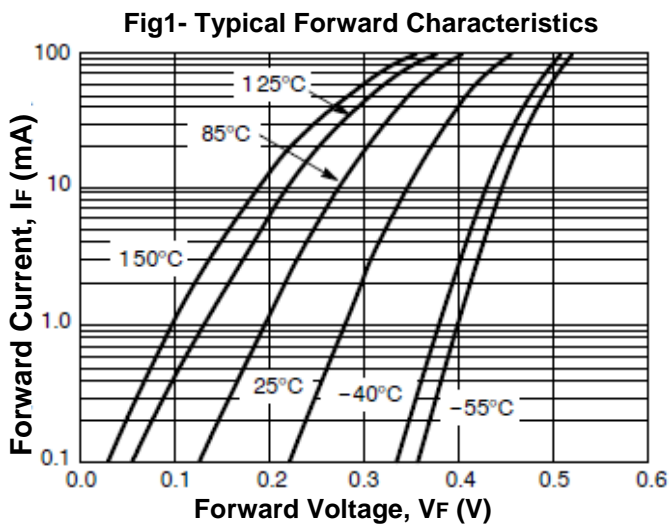
Two Terminals Schottky Barrier Diode

BAT54WS3

Electrical Characteristics ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	Min.	Typ.	Max.	Unit	Conditions
$V_{(BR)R}$	Reverse Breakdown Voltage	30	-	-	V	$I_R=10\mu\text{A}$
V_F	Maximum Instantaneous Forward Voltage	-	0.22	0.24	V	$I_F=0.1\text{mA}$
		-	0.29	0.32		$I_F=1\text{mA}$
		-	0.35	0.40		$I_F=10\text{mA}$
		-	0.41	0.50		$I_F=30\text{mA}$
		-	0.52	1.00		$I_F=100\text{mA}$
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	-	0.5	2.0	μA	$V_R=25\text{V}$
C_T	Total Capacitance	-	7.6	10	pF	$V_R=1\text{V}$, $f=1\text{MHz}$
T_{rr}	Reverse Recovery Time	-	-	5.0	nS	$I_F=I_R=10\text{mA}$, $I_{R(REC)}=1\text{mA}$,

Typical Characteristics Curves



Two Terminals Schottky Barrier Diode

BAT54WS3

Fig.3- Typical Junction Capacitance

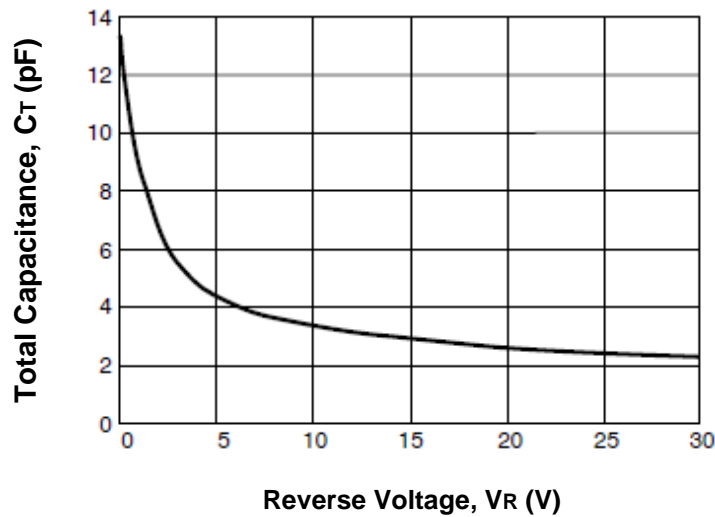
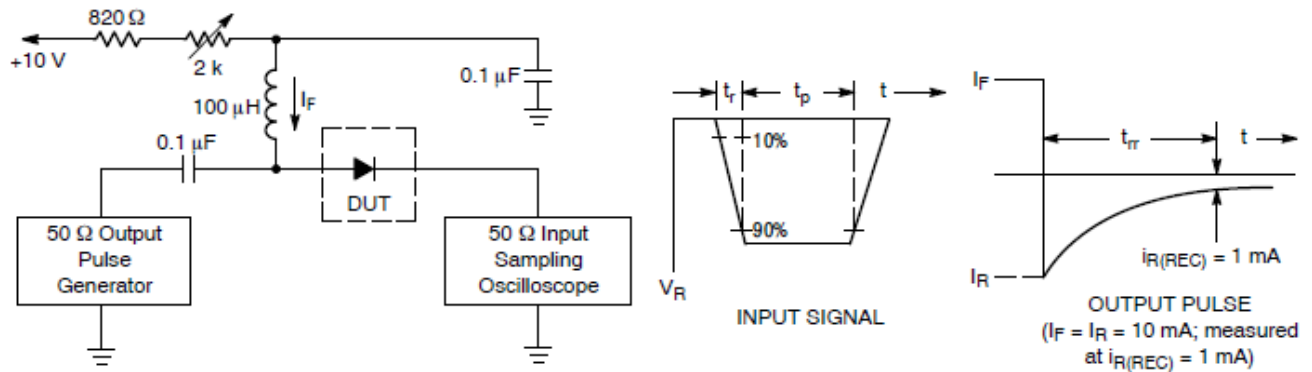


Fig.4- Recovery Time Equivalent Test Circuit

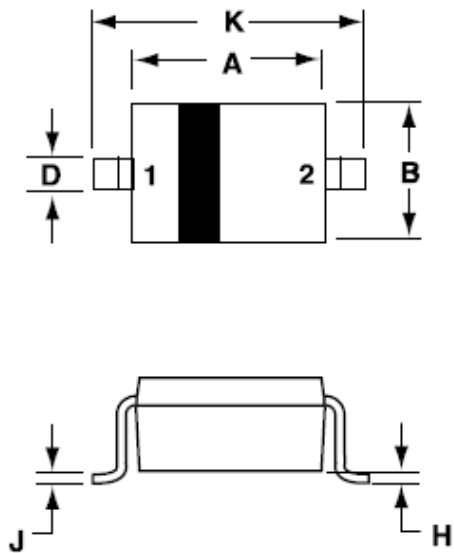


- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10 mA.
 2. Input pulse is adjusted so $i_{R(\text{peak})}$ is equal to 10 mA.
 3. $t_p \gg t_{rr}$

Two Terminals Schottky Barrier Diode

BAT54WS3

Dimensions in inch (mm)



Dim	MILLMETERS	
	Min	Max
A	1.60	1.80
B	1.15	1.35
C	0.80	1.00
D	0.25	0.40
E	0.15REF	
H	0.00	0.10
J	0.089	0.177
K	2.30	2.70

PIN 1.CATHODE
2.ANODE

SOD-323

How to contact us:

US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 824-8766 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: taitron@taitroncomponents.com

Http://www.taitroncomponents.com

TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.
42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

TAITRON COMPONENTS INCORPORATED TAIWAN, TAIPEI

5F-2, NO. 77, SEC. 1, HSIN TAI WU ROAD, HSI-CHIH, TAIPEI HSIEN, TAIWAN R.O.C.

Tel: 886-2-2698-8878

Fax: 886-2-2698-8879

TAITRON COMPONETS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

METROBANK PLAZA, 1160 WEST YAN'AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931