

# 1N4448WS/1N4148WS/1N914BWS

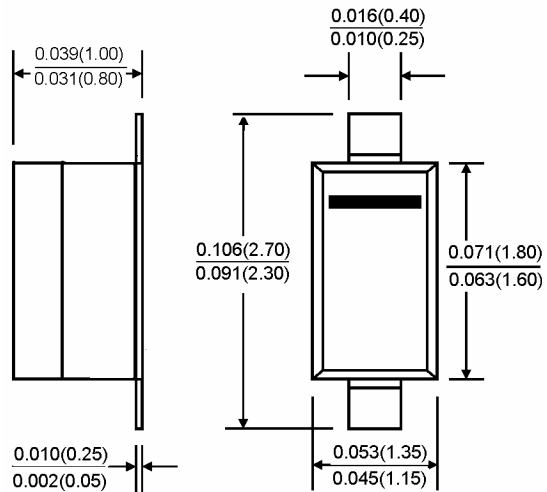
200mW Small Fast Switching  
Surface Mount Diode

**SOD-323F**



## Features

- ✧ Fast switching device ( $T_{RR} < 4.0\text{nS}$ )
- ✧ General purpose diodes
- ✧ Flat lead SOD-323F small outline plastic package
- ✧ Surface device type mounting
- ✧ Moisture sensitivity level 1
- ✧ Clip bonding construction, good thermal capability
- ✧ Pb free version and RoHS compliant
- ✧ Matte Tin(Sn) lead finish with Nickel(Ni) underplate
- ✧ Band indicates cathode



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

### Maximum Ratings

Type Number	Symbol	Value	Units
Power Dissipation	P <sub>d</sub>	200	mW
Non-Repetitive Peak Reverse Voltage	V <sub>RSM</sub>	100	V
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	75	V
Repetitive Peak Forward Current	I <sub>FRM</sub>	300	mA
Continuous Forward Current	I <sub>o</sub>	150	mA
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to + 150	°C

### Electrical Characteristics

Type Number	Symbol	Min	Max	Units
Breakdown Voltage IR=100uA IR=5uA	B <sub>v</sub>	100 75		V
Forward Voltage 1N4448WS, 1N914BWS IF=5.0mA 1N4148WS IF= 10mA 1N4448WS, 1N914BWS IF =100mA	V <sub>F</sub>	0.62	0.72 1.0 1.0	V
Reverse Leakage Current VR=20V VR=75V	I <sub>R</sub>		25 5	nA uA
Junction Capacitance VR=0, f=1.0MHz	C <sub>j</sub>	-	4.0	pF
Reverse Recovery Time (I <sub>F</sub> =10mA, I <sub>R</sub> =60mA, R <sub>L</sub> =100Ω, I <sub>RR</sub> =1mA)	T <sub>rr</sub>	-	4.0	nS

RATINGS AND CHARACTERISTIC CURVES(1N4448WS/1N4148WS/1N914BWS)

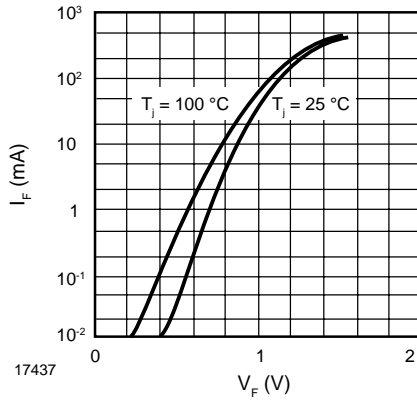


Figure 1. Forward characteristics

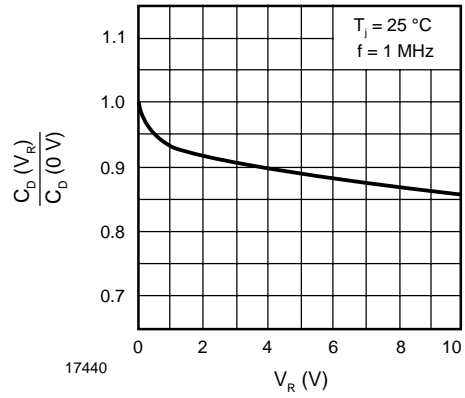


Figure 4. Relative Capacitance vs. Reverse Voltage

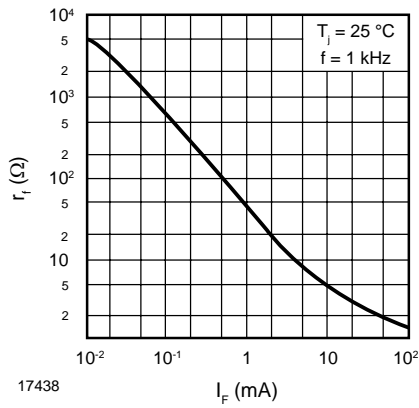


Figure 2. Dynamic Forward Resistance vs. Forward Current

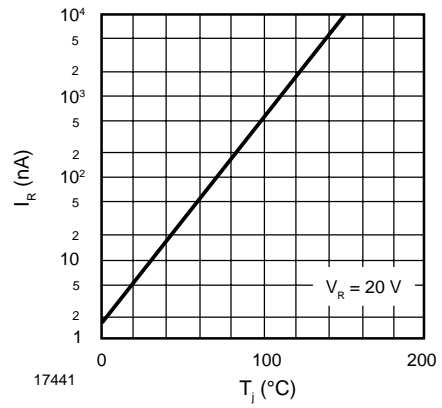


Figure 5. Leakage Current vs. Junction Temperature

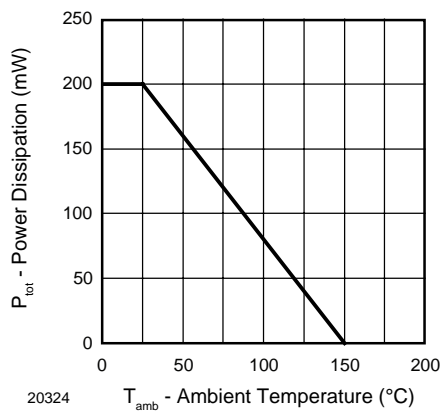


Figure 3. Admissible Power Dissipation vs. Ambient Temperature

RATINGS AND CHARACTERISTIC CURVES(BZT55B SERIES)

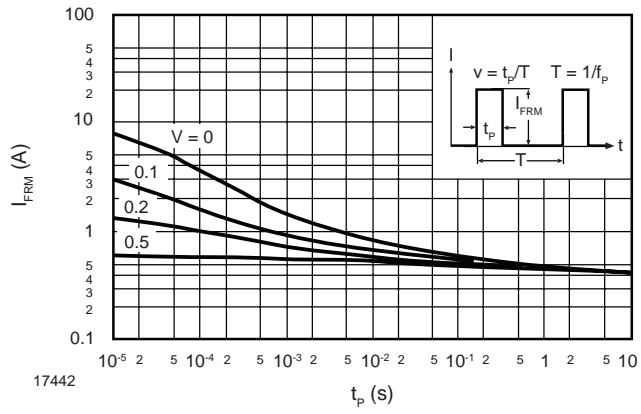


Figure 6. Admissible Repetitive Peak Forward Current vs. Pulse Duration