

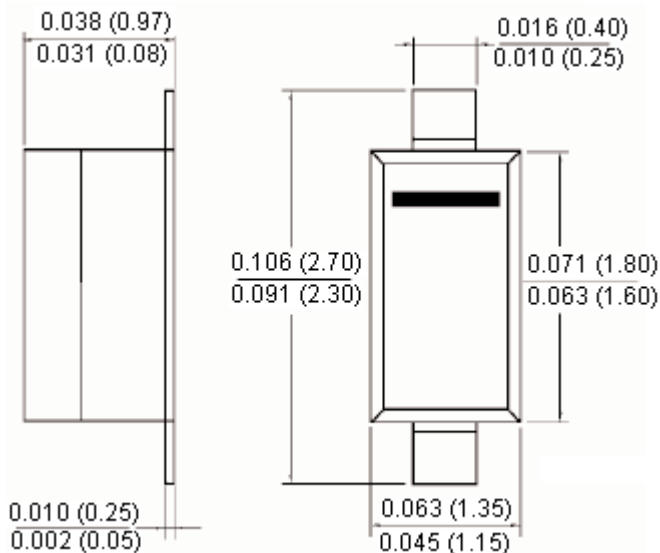


### Features:

- Low forward voltage drop.
- Flat lead SOD-323F small outline plastic package.
- Surface device type mounting.
- Moisture sensitivity level 1.
- Clip bonding construction, good thermal capability.
- RoHS compliant.
- Matte Tin (Sn) lead finish.
- Band indicates cathode.



### SOD-323F



Dimensions : Inches (Millimetres)

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Type Number	Symbol	Value	Units
Power Dissipation	$P_d$	200	mW
Repetitive Peak Reverse Voltage	$V_{RRM}$	30	V
Maximum DC Blocking Voltage	$V_R$		
Average Rectified Forward Current	$I_F (AV)$	200	mA
Peak Forward Surge Current	$I_{FSM}$	4.0	A
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to + 125	°C

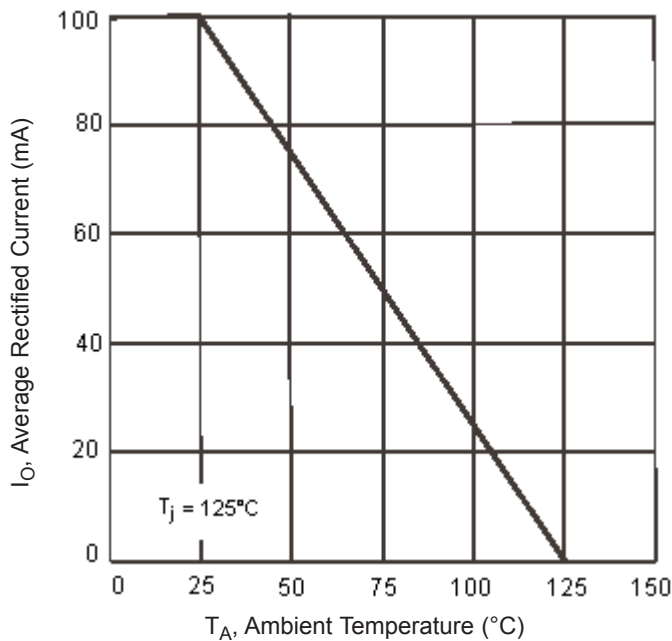
## Electrical Characteristics

Type Number	Symbol	Minimum	Maximum	Units
Breakdown Voltage at $I_R = 100\mu A$	$B_V$	30	-	V
Reverse Leakage Current at $V_R = 25V$	$I_R$	-	500	nA
Forward Voltage BAT42WS at $I_F = 200mA$ BAT42WS at $I_F = 10mA$ BAT42WS at $I_F = 50mA$	$V_F$	-	1.0 0.4 0.65	V
Junction Capacitance $V_R = 1, f = 1.0MHz$	$C_j$	7 (Typical)		pF
Reverse Recovery Time (Note 1)	$t_{rr}$	5 (Typical)		nS

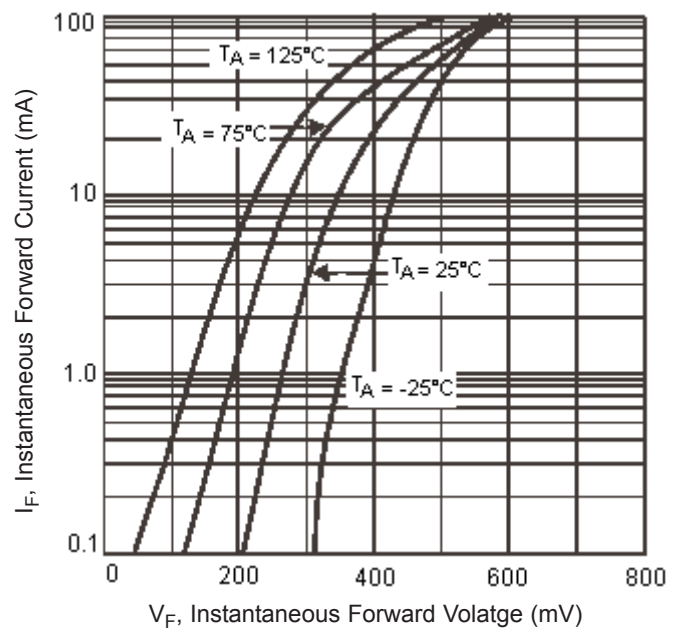
Notes : 1. Reverse Recovery Test Conditions:  $I_F = I_R = 10mA, I_{rr} = 1mA, R_L = 100\Omega$ .

## Ratings and Characteristic Curves (BAT42WS)

Forward Current Derating Curve

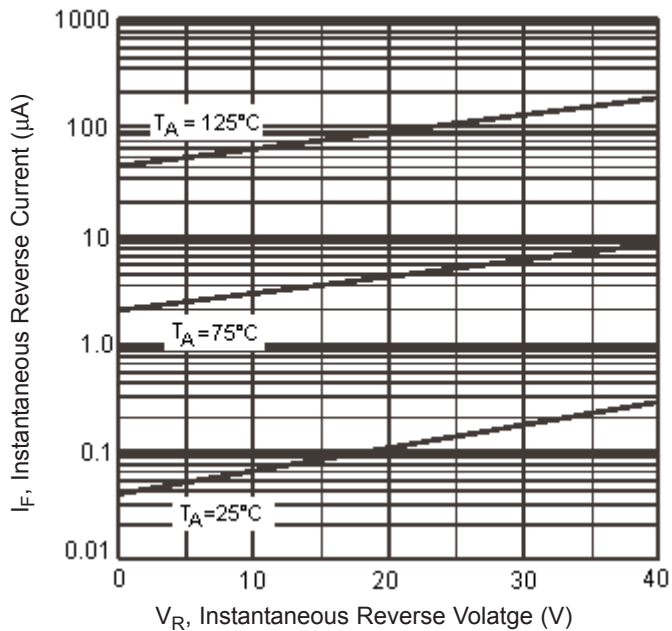


Typical Forward Characteristics

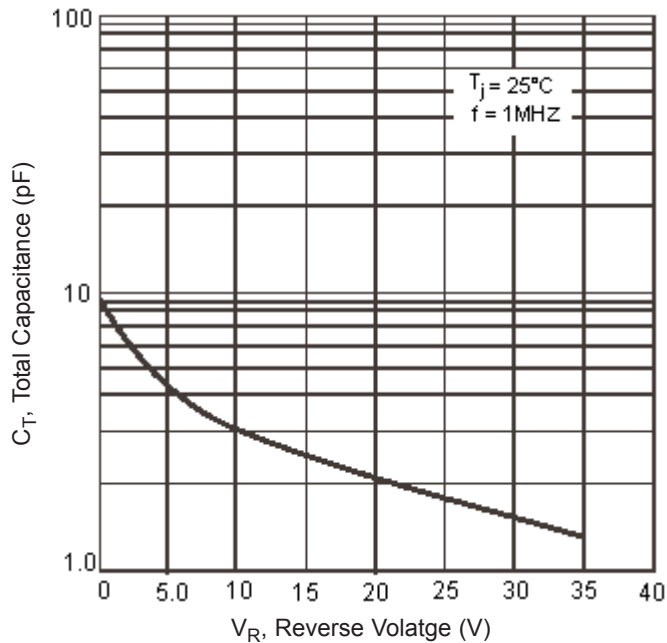


## Ratings and Characteristic Curves (BAT42WS)

Typical Reverse Characteristics



Total Capacitance vs. Reverse Voltage



### Part Number Table

Description	Part Number
Diode, High Speed, SOD-123F	1N4448W

## Notes:

## International Sales Offices:

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