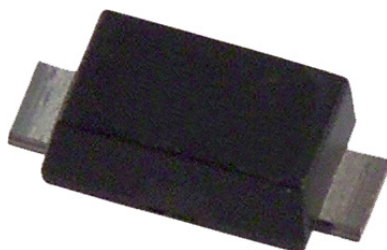


Schottky Diode

SOD323-F



RoHS
Compliant



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
- Matte Tin (Sn) lead finish
- Band indicates cathode

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	A
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 125	°C

Electrical Characteristics

Type Number	Symbol	Min.	Max.	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 0.4 0.65	V
Junction Capacitance $V_R = 1, f = 1MHz$	C_j	7 (Typical)		pF
Reverse Recovery Time (Note 1)	t_{rr}	5 (Typical)		nS

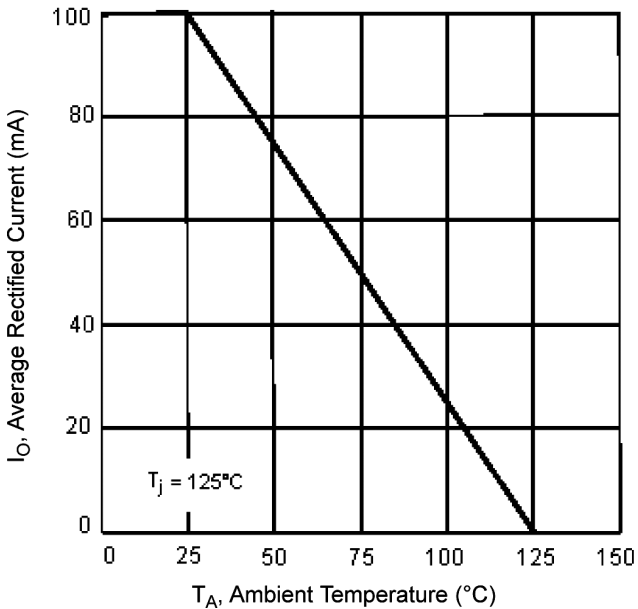
Notes : 1. Reverse Recovery Test Conditions: $I_F = I_R = 10mA, I_{rr} = 1mA, R_L = 100\Omega$.

Schottky Diode SOD323-F

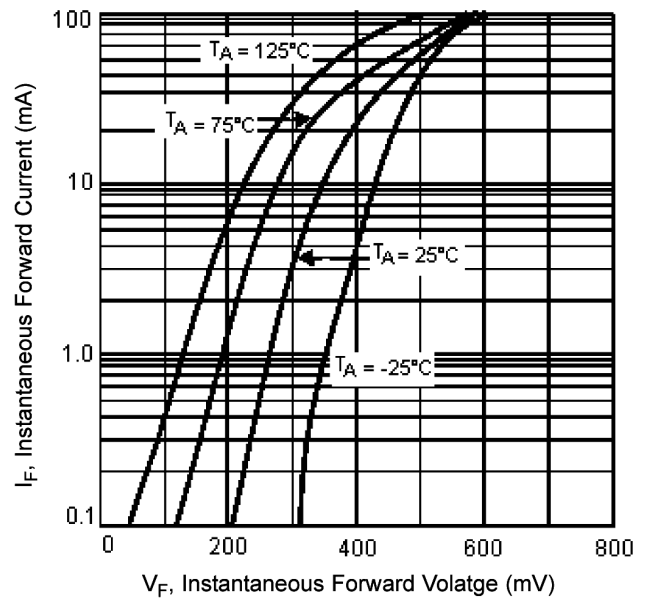


Ratings and Characteristic Curves (BAT42WS)

Forward Current Derating Curve

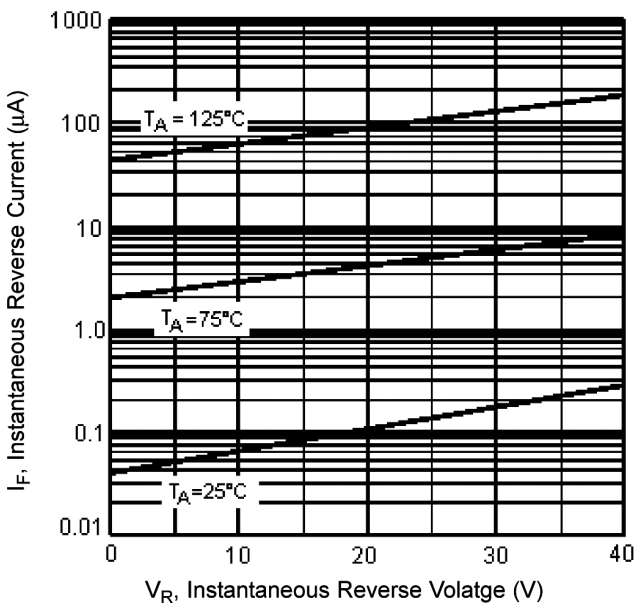


Typical Forward Characteristics

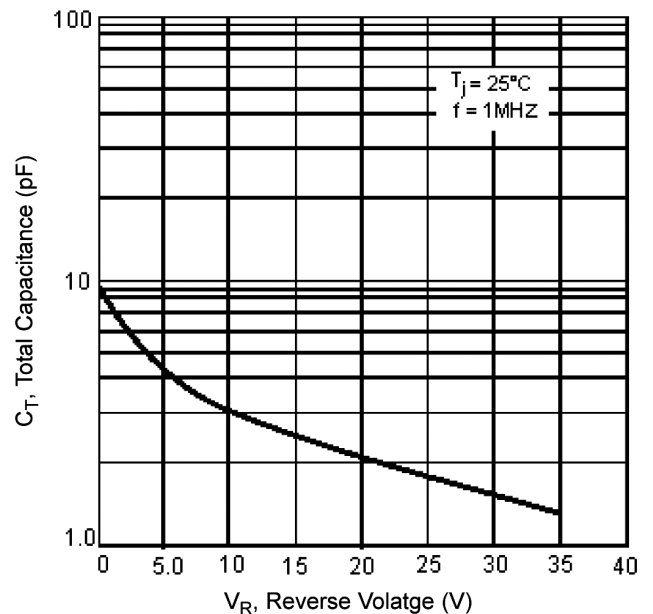


Ratings and Characteristic Curves (BAT42WS)

Typical Reverse Characteristics



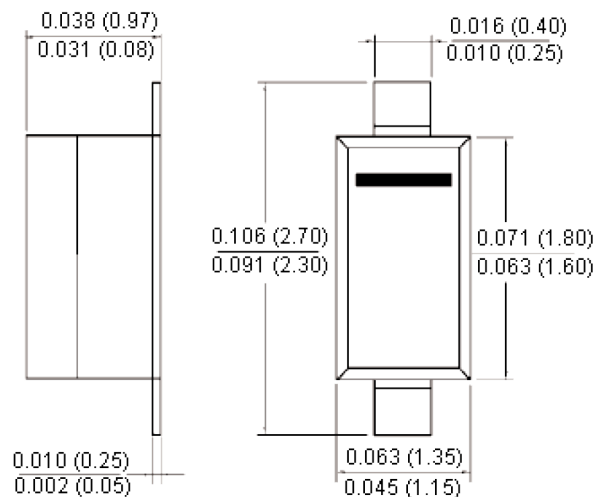
Total Capacitance vs. Reverse Voltage



Schottky Diode SOD323-F



SOD-323F



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Diode, Schottky, SOD323-F	BAT42WS

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell plc 2012.

www.element14.com
www.farnell.com
www.newark.com

