

Small Signal Product

0.2W Surface Mount Flat Lead Fast Switching Schottky Barrier Diode

FEATURES

- Low forward voltage drop
- Surface mount device type
- Moisture sensitivity level 1
- RoHS compliant
- Clip bonding construction, good thermal capability



SOD-323F



MECHANICAL DATA

- Case: Flat lead SOD-323F small outline plastic package
- Matte tin (Sn) lead finish
- Band indicates cathode

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation	P_D	200	mW
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Maximum DC Blocking Voltage	V_R	30	V
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	$^\circ\text{C}$

PARAMETER	SYMBOL	MIN	MAX	UNIT
Breakdown Voltage	B_V	30	--	V
Forward Voltage	V_F	BAT42WS at $I_F = 200\text{ mA}$	1.0	V
		BAT42WS at $I_F = 10\text{ mA}$	0.4	
		BAT42WS at $I_F = 50\text{ mA}$	0.65	
		BAT43WS at $I_F = 200\text{ mA}$	1.0	
		BAT43WS at $I_F = 2\text{ mA}$	0.33	
		0.26	0.45	
Reverse Leakage Current	I_R	--	500.0	nA
Junction Capacitance	C_J	7 (Typ.)		pF
Reverse Recovery Time	t_{rr}	5 (Typ.)		ns

Small Signal Product

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

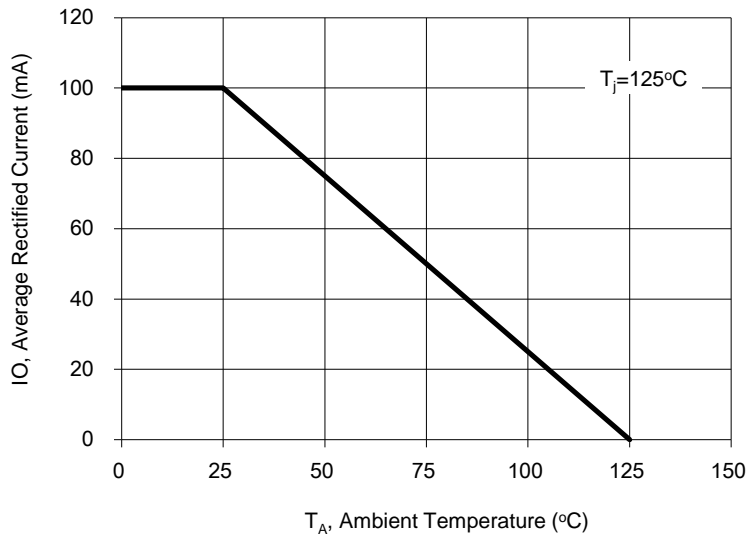


Fig. 2 Typical Forward Characteristics

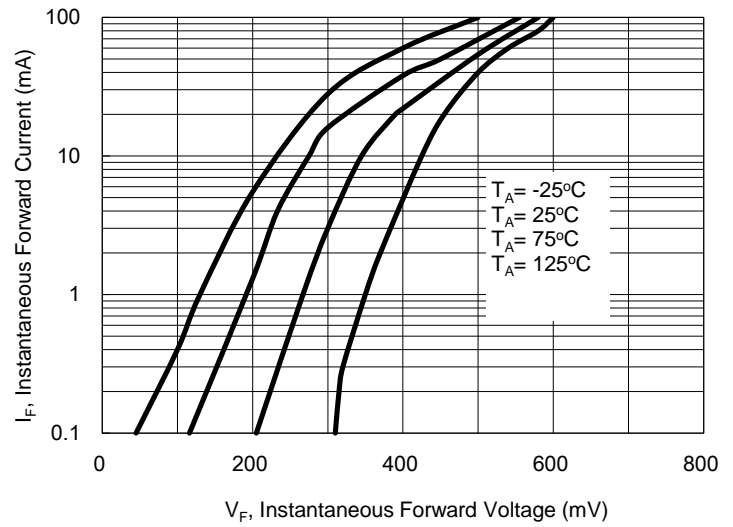


Fig. 3 Typical Reverse Characteristics

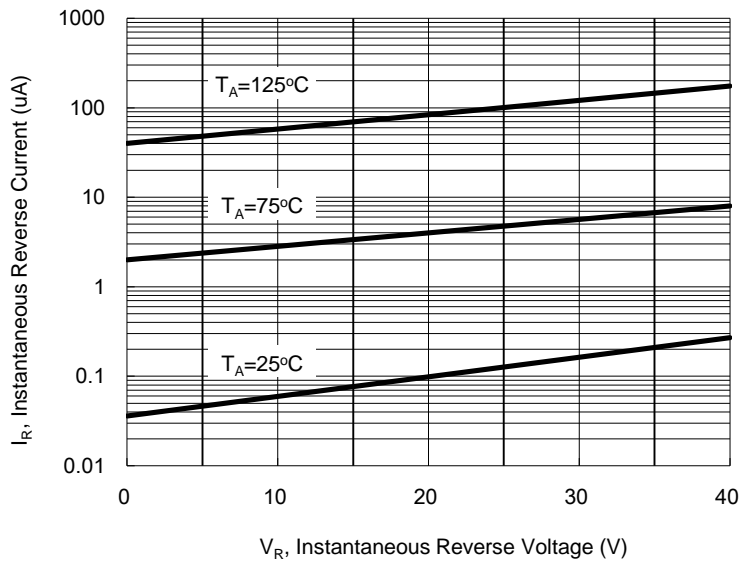
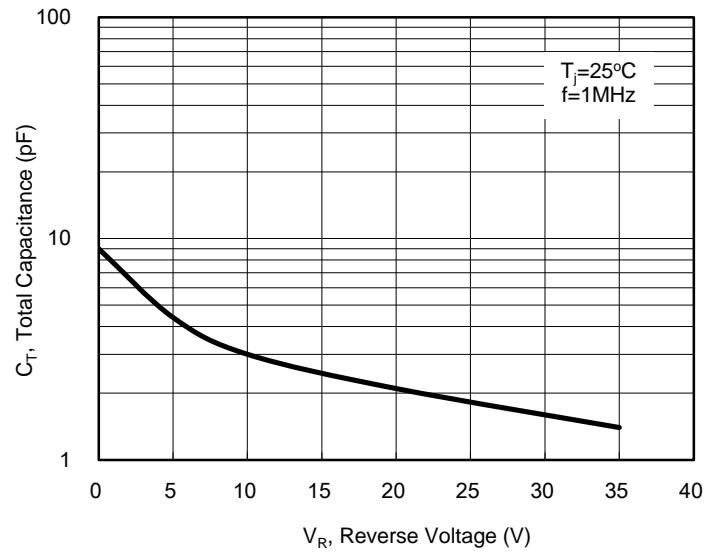


Fig. 4 Total Capacitance VS. Reverse Voltage



Small Signal Product

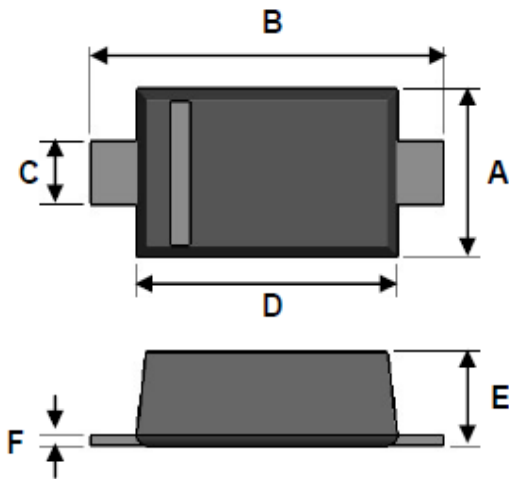
ORDERING INFORMATION						
PART NO.	MANUFACTURE CODE	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING	MARKING
BAT42WS	(Note)	RR	G	SOD-323F	3K / 7" Reel	B1
BAT43WS		RR	G	SOD-323F	3K / 7" Reel	B2

Note: Manufacture special control, if empty means no special control requirement.

EXAMPLE					
PREFERRED P/N	PART NO.	MANUFACTURE CODE	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
BAT42WS RRG	BAT42WS		RR	G	Green compound
BAT42WS-B0 RRG	BAT42WS	B0	RR	G	Green compound
BAT42WS-L0 RRG	BAT42WS	L0	RR	G	Green compound

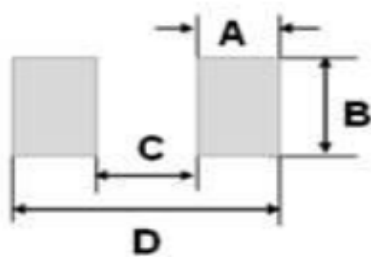
Small Signal Product

DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.15	1.35	0.045	0.053
B	2.30	2.80	0.091	0.110
C	0.25	0.40	0.010	0.016
D	1.60	1.80	0.063	0.071
E	0.80	1.10	0.031	0.043
F	0.05	0.25	0.002	0.010

SUGGESTED PAD LAYOUT



DIM.	Unit(mm)	Unit(inch)
	Typ.	Typ.
A	0.630	0.025
B	0.830	0.033
C	1.600	0.063
D	2.860	0.113

Small Signal Product**Notice**

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.