

**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

<b>MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS</b> ( $T_A=25^\circ\text{C}$ unless otherwise noted)			
<b>PARAMETER</b>	<b>SYMBOL</b>	<b>VALUE</b>	<b>UNIT</b>
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	$^\circ\text{C}$

<b>PARAMETER</b>	<b>SYMBOL</b>	<b>MIN</b>	<b>MAX</b>	<b>UNIT</b>
Breakdown Voltage	$B_V$	30	--	V
Forward Voltage	$V_F$	0.26	BAT42WS at $I_F = 200\text{ mA}$	1.0
			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
			BAT43WS at $I_F = 15\text{ mA}$	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

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**RATINGS AND CHARACTERISTICS CURVES**

(TA=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

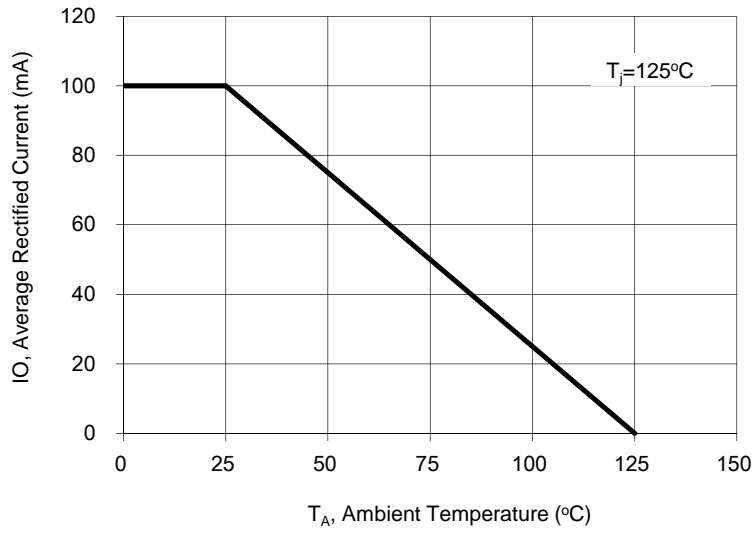


Fig. 2 Typical Forward Characteristics

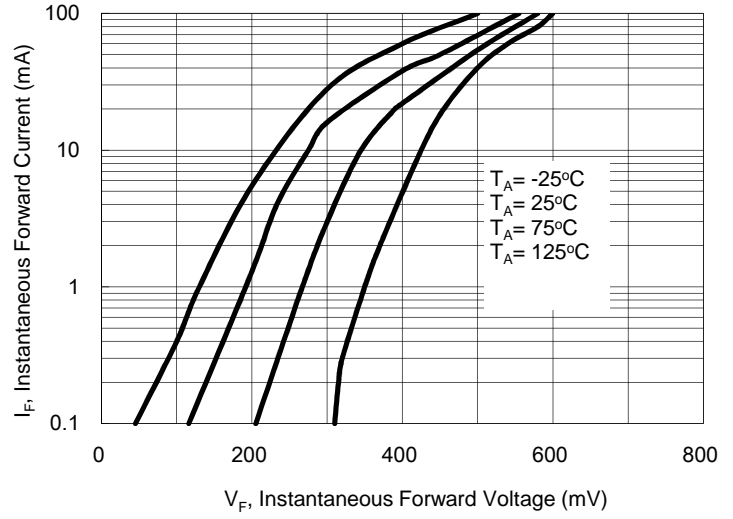


Fig. 3 Typical Reverse Characteristics

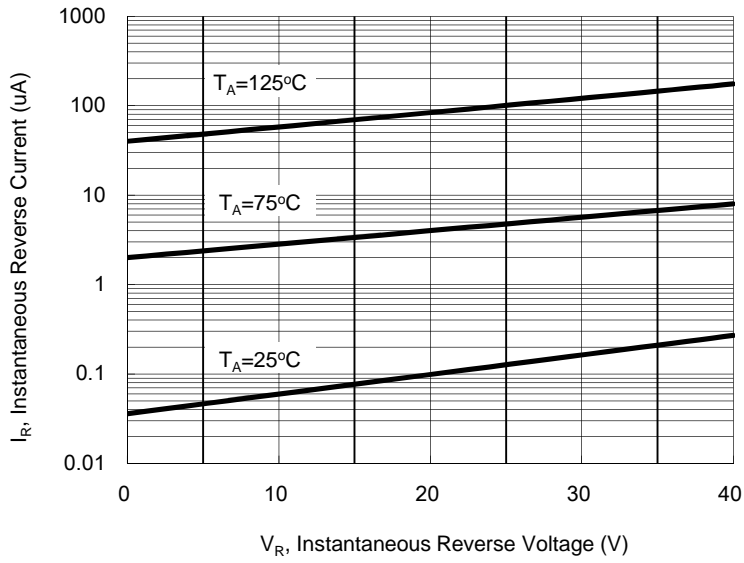
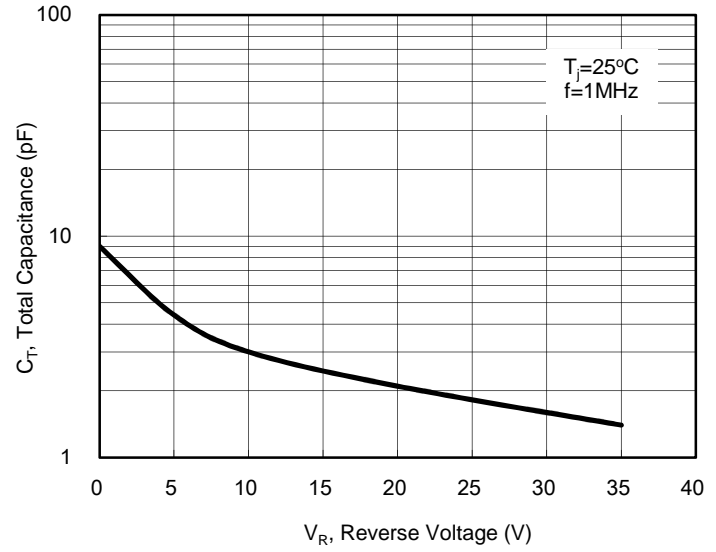


Fig. 4 Total Capacitance VS. Reverse Voltage



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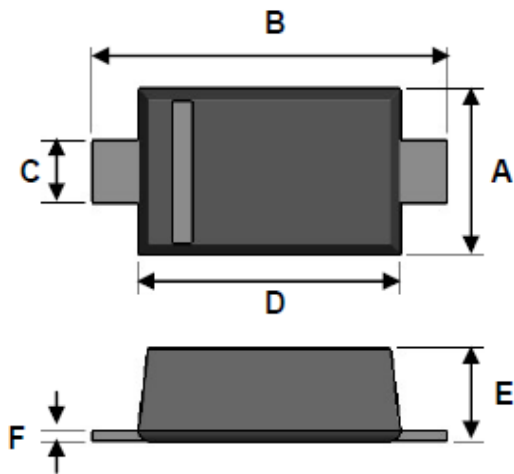
<b>ORDERING INFORMATION</b>						
<b>PART NO.</b>	<b>MANUFACTURE CODE</b>	<b>PACKING CODE</b>	<b>GREEN COMPOUND CODE</b>	<b>PACKAGE</b>	<b>PACKING</b>	<b>MARKING</b>
BAT42WS	(Note)	RR	G	SOD-323F	3K / 7" Reel	B1
BAT43WS		RR	G	SOD-323F	3K / 7" Reel	B2

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

<b>EXAMPLE</b>					
<b>PREFERRED P/N</b>	<b>PART NO.</b>	<b>MANUFACTURE CODE</b>	<b>PACKING CODE</b>	<b>GREEN COMPOUND CODE</b>	<b>DESCRIPTION</b>
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

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**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

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