

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	0.26	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	
			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

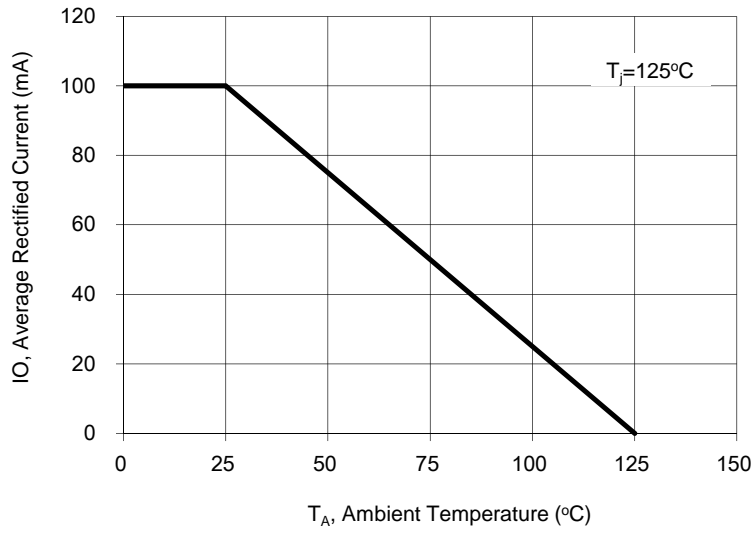


Fig. 2 Typical Forward Characteristics

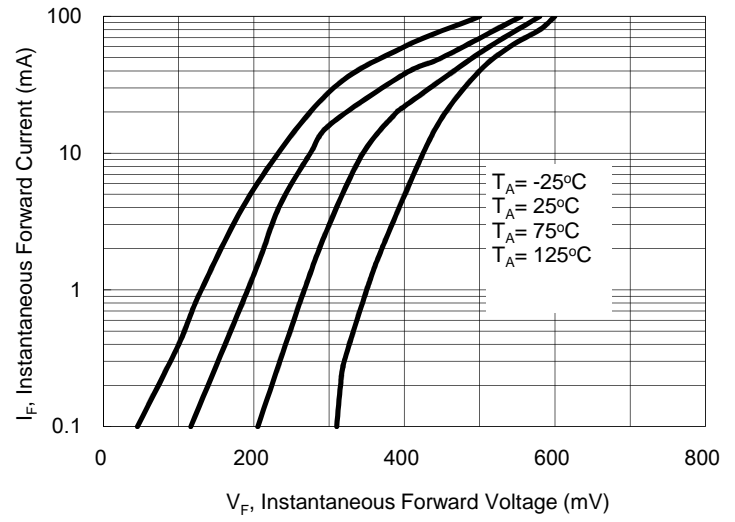


Fig. 3 Typical Reverse Characteristics

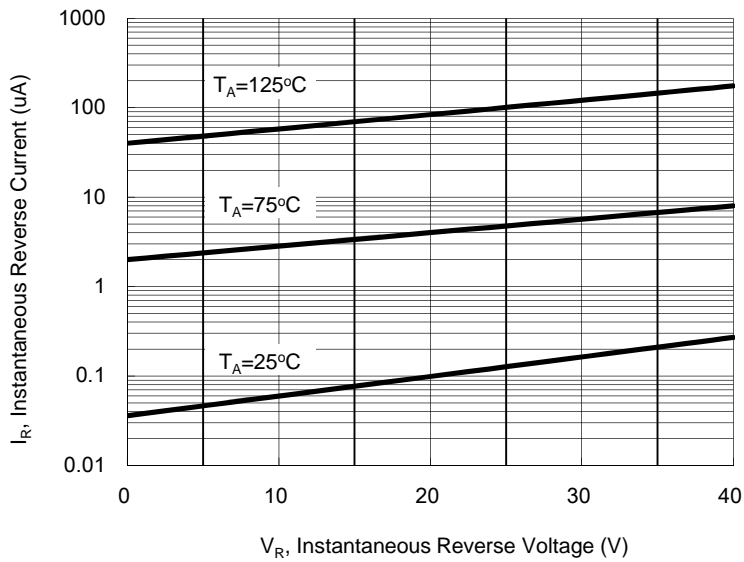
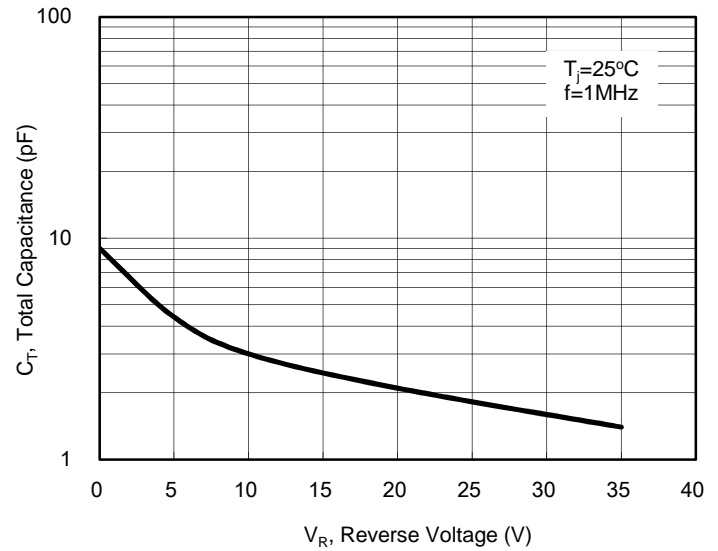


Fig. 4 Total Capacitance VS. Reverse Voltage



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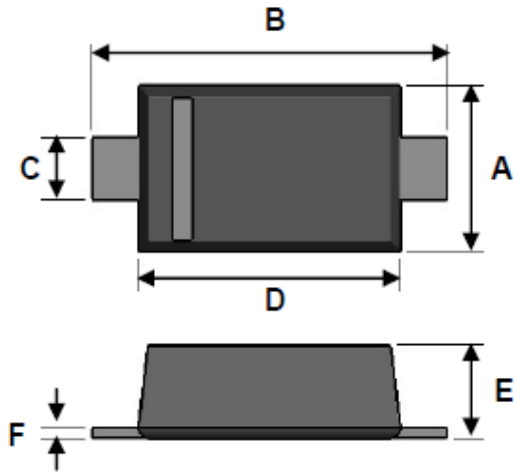
ORDERING INFORMATION						
PART NO.	MANUFACTURE CODE	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING	MARKING
BAT42WS	(Note)	RQ	G	SOD-323F	3K / 7" Reel	B1
BAT42WS		RR	G	SOD-323F	3K / 7" Reel	B1
BAT43WS		RQ	G	SOD-323F	3K / 7" Reel	B2
BAT43WS		RR	G	SOD-323F	3K / 7" Reel	B2

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 RQG	BAT42WS		RQ	G	Green compound
BAT42WS-B0 RQG	BAT42WS	B0	RQ	G	Green compound
BAT42WS-L0 RQG	BAT42WS	L0	RQ	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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