

FEATURES AND BENEFITS

Product Summary		
I_{FM}	200mA	@25 °C
V_F	0.33V	@2.0mA
V_{RRM}	30V	@25 °C

- Low Forward Voltage Schottky Rectifier
- High Frequency Inverters
- RoHS Compliant / Green EMC UL Flammability Classification Rating 94V-0
- Matte Tin (Sn) Lead finish Solderable per MIL-STD-202, Method 208
- Moisture Sensitivity: Level 1 per J-STD-020
- Weight: 0.01 grams (Approximate)

SOD-123



Cathode  Anode

Maximum Ratings (TA = 25 °C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Working Reverse Voltage	V_{RWM}	30	V
Forward Continuous Current	I_{FM}	200	mA
Non-Repetitive Peak Forward Surge Current (@t=8.3ms)	I_{FSM}	500	mA
Power Dissipation	P_{TM}	200	mW
Junction Temperature	T_J	-55 to +125	°C
Storage Temperature	T_{STG}	-55 to +125	°C

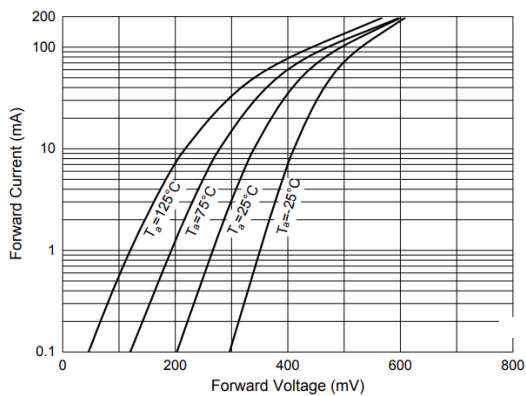
THERMAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Thermal Resistance from Junction to Ambient*	$R_{\theta JA}$	625	°C/W

* Device mounted on 1"x1" FR4 PCB

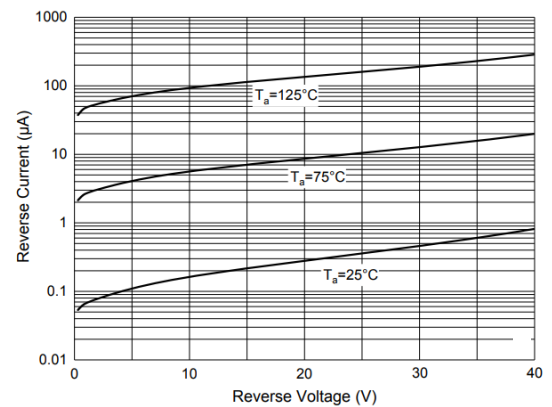
ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	CONDITION	MIN	TYP	MAX	UNIT
Forward Voltage	V_F	$I_F = 2.0\text{mA}$	0.26		0.33	V
		$I_F = 15\text{mA}$			0.45	
		$I_F = 200\text{mA}$			1.0	
Reverse Current	I_R	$V_R = 25\text{V}$			0.5	μA
		$V_R = 25\text{V } T_J = 100^\circ\text{C}$			100	
Capacitance	C_T	$V_R = 1\text{V}, f = 1\text{MHz}$			10	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10\text{mA}, I_{rr} = 0.1 * I_R, R_L = 100\Omega$			5.0	ns

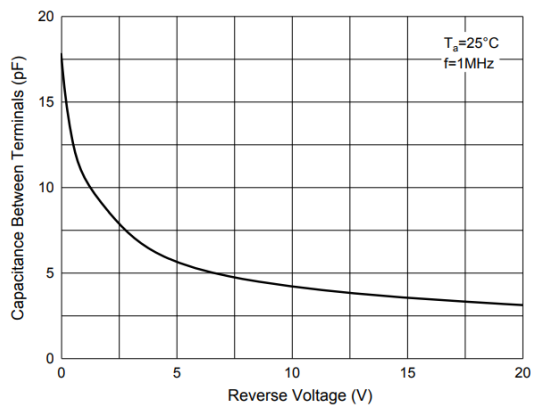
RATING AND CHARACTERISTICS CURVES



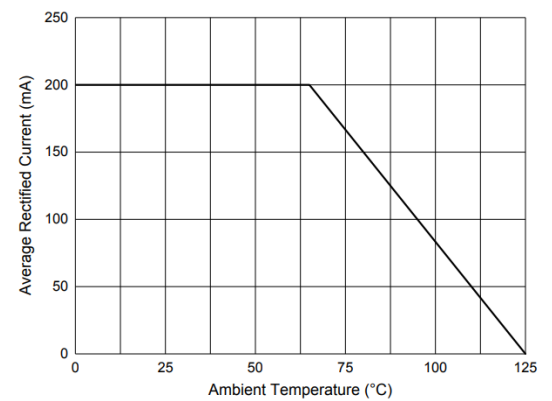
Forward current (I_F) vs Forward voltage (V_F)



Reverse current (I_R) vs Reverse voltage (V_R)



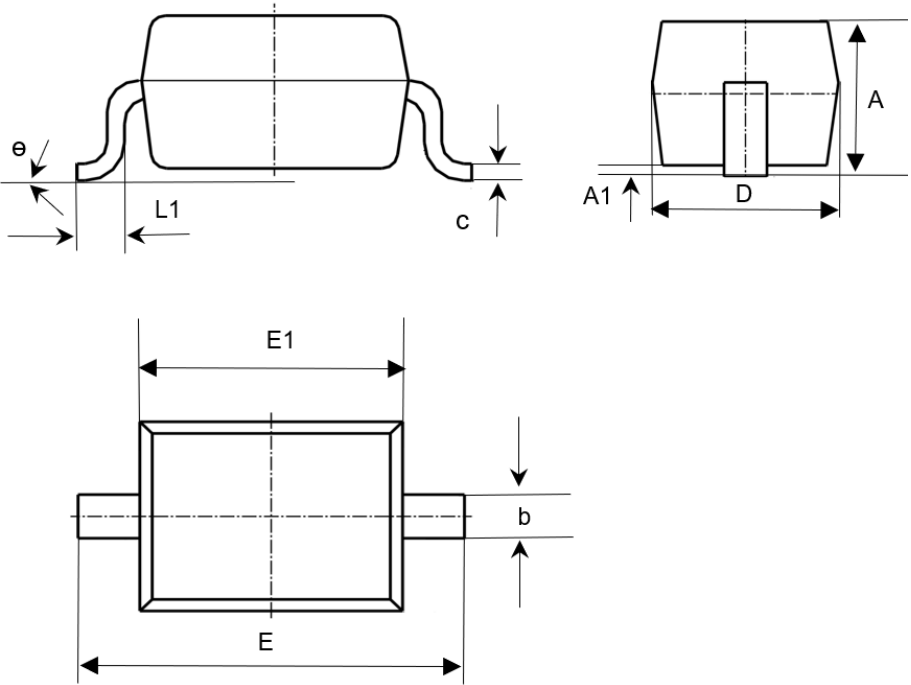
Capacitance Characteristics



Forward Current Derating Curve

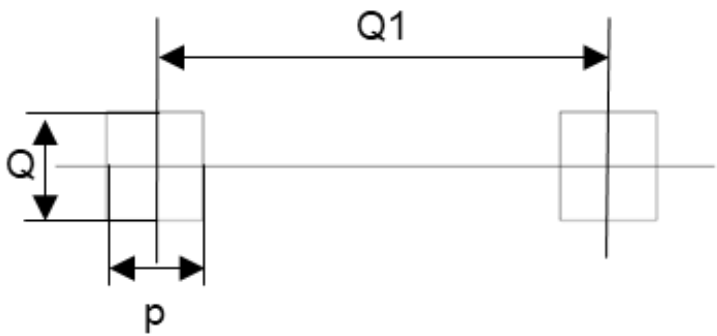
PACKAGE OUTLINE DIMENSIONS

SOD-123



Symbol	MIN	MAX
A	1.05	1.25
A1	0.00	0.10
b	0.45	0.65
c	0.08	0.15
D	1.50	1.70
E	3.55	3.85
E1	2.60	2.80
L1	0.25	0.45
θ	0°	8°
Unit: mm		

SUGGESTED PAD LAYOUT



Symbol	Typ
Q1	3.24
Q	1.0
p	0.8
Unit: mm	

DEVICE MARKING AND ORDERING INFORMATION

DEVICE	Marking	Quantity	Packing
BAT43W	S8	3000/Reel	Tape & Reel

NOTICE:

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