

BAT46W

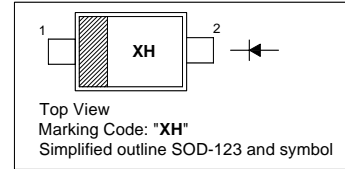
SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

- High breakdown voltage
- Low forward voltage
- Surface mount device

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

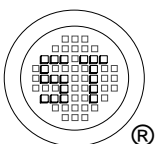


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	150	mA
Repetitive Peak Forward Current (at $t_p < 1\text{ s}$)	I_{FRM}	350	mA
Surge Forward Current (at $t_p < 10\text{ ms}$)	I_{FSM}	750	mA
Power Dissipation	P_{tot}	200	mW
Thermal Resistance Junction Ambient	R_{thJA}	420	$^\circ\text{C/W}$
Operating Temperature Range	T_J	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_s	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	100	-	-	V
Forward Voltage at $I_F = 0.1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 250\text{ mA}$	V_F	-	-	0.25 0.45 1	V
Reverse Current at $V_R = 1.5\text{ V}$ at $V_R = 10\text{ V}$ at $V_R = 50\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 1.5\text{ V}, T_j = 60\text{ }^\circ\text{C}$ at $V_R = 10\text{ V}, T_j = 60\text{ }^\circ\text{C}$ at $V_R = 50\text{ V}, T_j = 60\text{ }^\circ\text{C}$ at $V_R = 75\text{ V}, T_j = 60\text{ }^\circ\text{C}$	I_R	-	-	0.5 0.8 2 5 5 7.5 15 20	μA
Total Capacitance at $V_R = 0\text{ V}, f = 1\text{ MHz}$ at $V_R = 1\text{ V}, f = 1\text{ MHz}$	C_T	-	20 12	-	pF



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ISO/TS 16949 : 2002
Certificate No. 05103



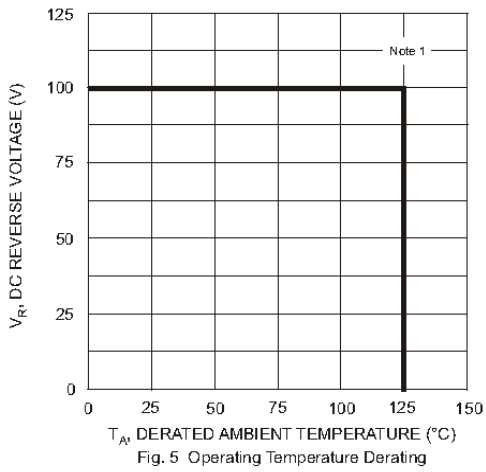
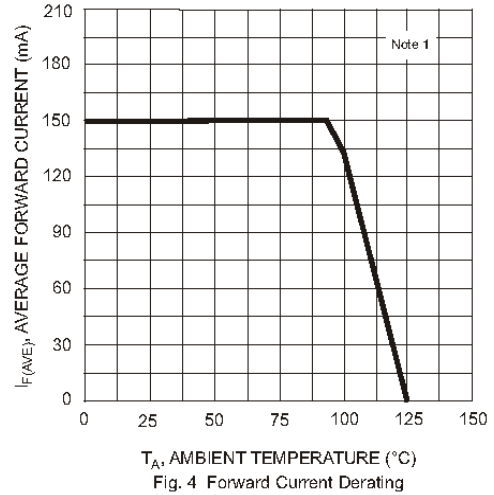
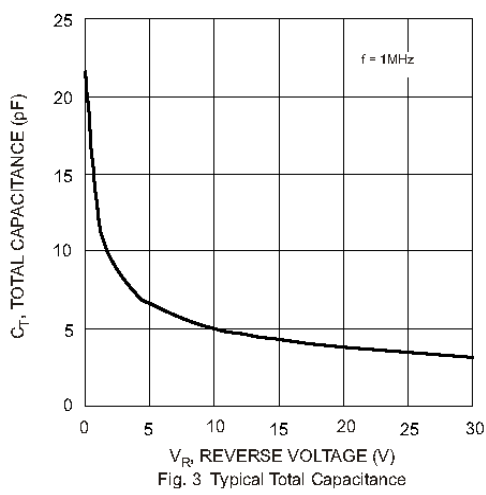
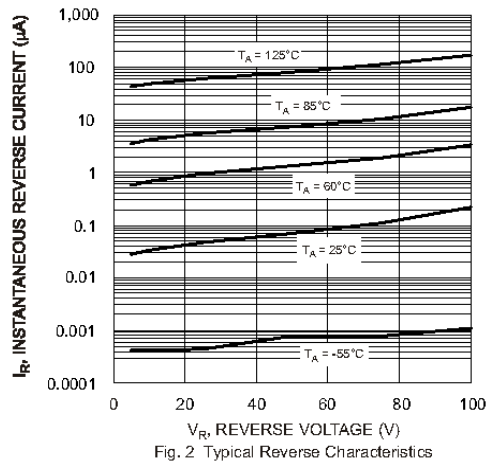
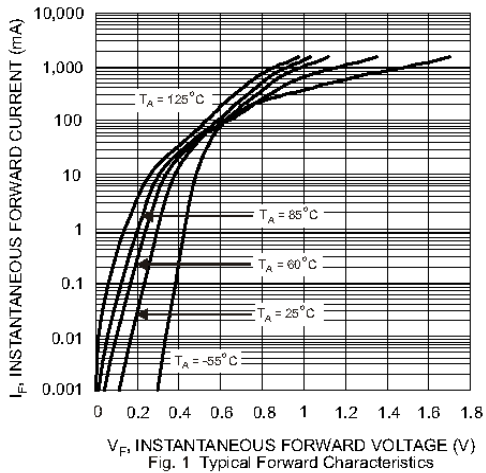
ISO 14001:2004
Certificate No. 7116



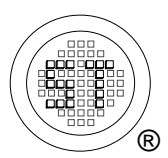
ISO 9001:2000
Certificate No. 0506098

Dated : 06/07/2007

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Note 1: Part mounted on FR-4 board with recommended pad layout, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.



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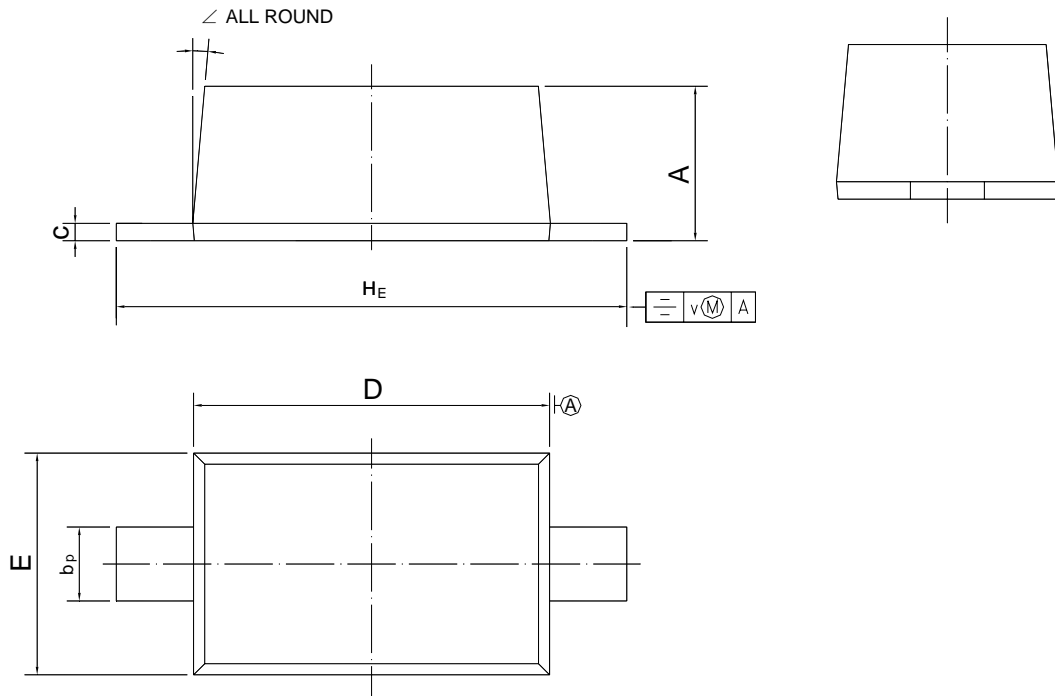
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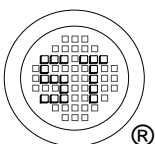
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b _p	c	D	E	H _E	v	∠
mm	1.15 1.05	0.6 0.5	0.135 0.127	2.7 2.6	1.65 1.55	3.9 3.7	0.2	5°



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