

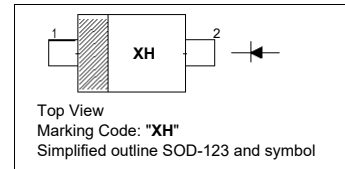
BAT46W SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

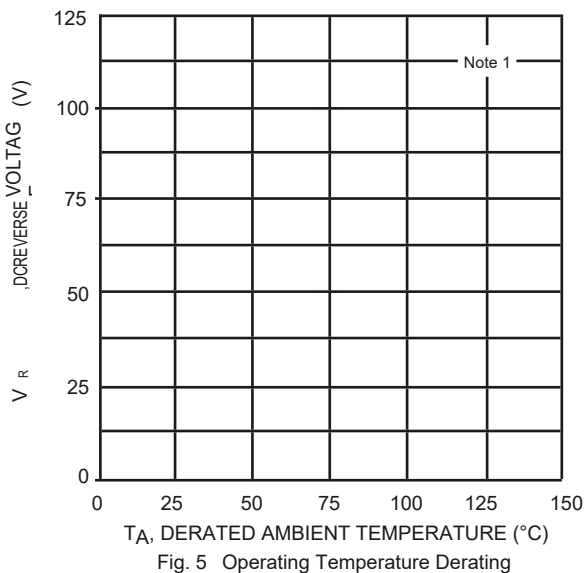
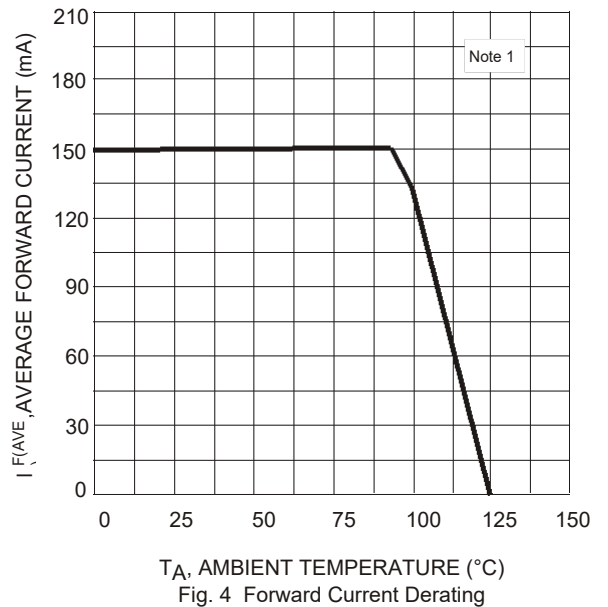
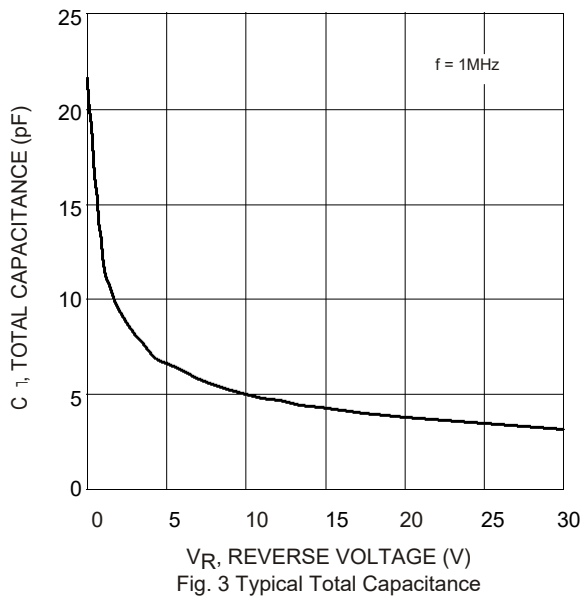
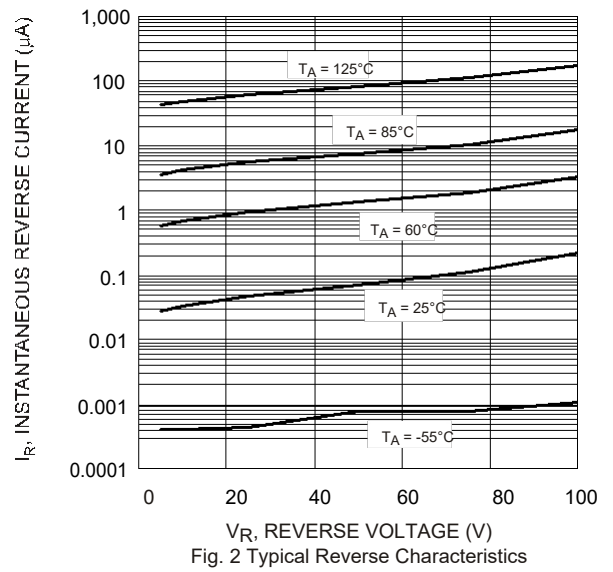
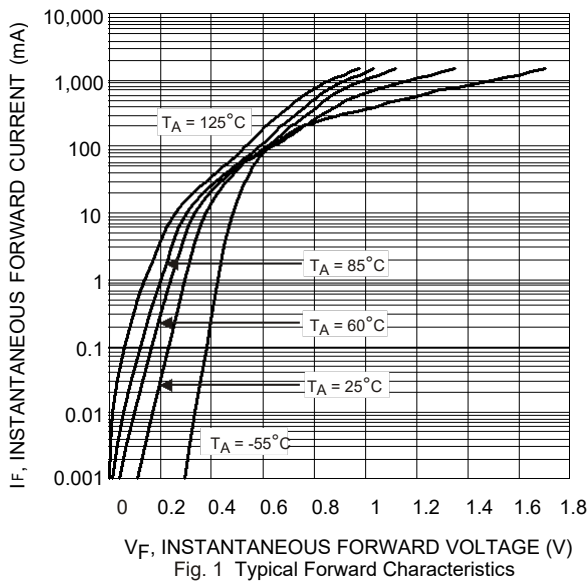


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	150	mA
Repetitive Peak Forward Current (at $t_p < 1$ s)	I_{FRM}	350	mA
Surge Forward Current (at $t_p < 10$ ms)	I_{FSM}	750	mA
Power Dissipation	P_{tot}	200	mW
Thermal Resistance Junction Ambient	R_{thJA}	500	$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	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 $V_R = 1.5 \text{ V}, T_j = 60^\circ\text{C}$ at $V_R = 10 \text{ V}, T_j = 60^\circ\text{C}$ at $V_R = 50 \text{ V}, T_j = 60^\circ\text{C}$ at $V_R = 75 \text{ V}, T_j = 60^\circ\text{C}$	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

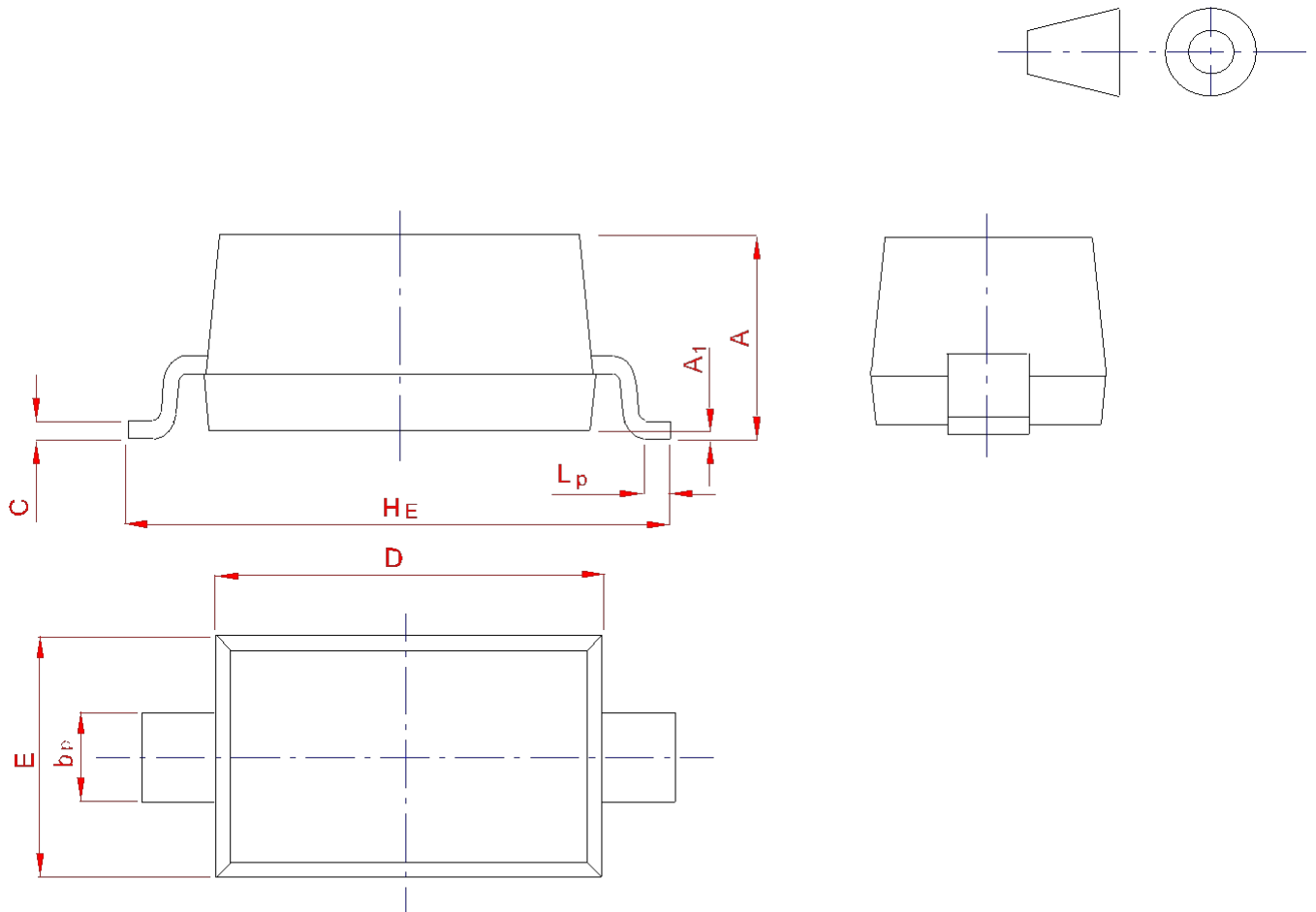


Note 1: Part mounted on FR-4 board with recommended pad layout, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	bp	C	D	E	HE	A1	Lp
mm	1.20	0.60	0.135	2.75	1.65	3.85	0.10	0.50
	0.90	0.50	0.100	2.55	1.55	3.55	0.01	0.20