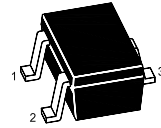


BAS40W / -04W / -05W / -06W

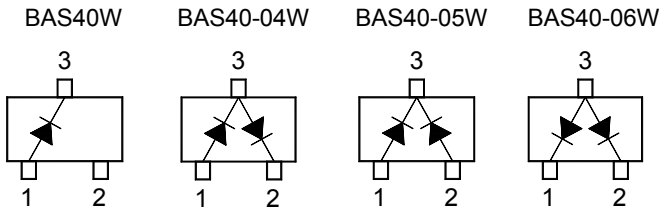
SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

- Low forward voltage
- Fast switching



SOT-323 Plastic Package



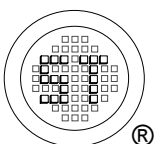
BAS40W Marking Code: **43**
 BAS40-04W Marking Code: **44**
 BAS40-05W Marking Code: **45**
 BAS40-06W Marking Code: **46**

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
DC Blocking Voltage	V_R	40	V
Forward Continuous Current	I_F	200	mA
Peak Forward Surge Current (at $t_p \leq 8.3\text{ ms}$)	I_{FSM}	600	mA
Power Dissipation	P_d	200	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_S	- 65 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 40\text{ mA}$	V_F	-	0.38	V
	V_F	-	1	V
Reverse Breakdown Voltage at $I_R = 10\text{ }\mu\text{A}$	$V_{(BR)R}$	40	-	V
Reverse Current at $V_R = 30\text{ V}$	I_R	-	200	nA
Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	-	5	pF
Reverse Recovery Time at $I_F = I_R = 10\text{ mA}$, $I_{rr} = 0.1 I_R$	t_{rr}	-	5	ns



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506088

Dated : 08/11/2007

BAS40W / -04W / -05W / -06W

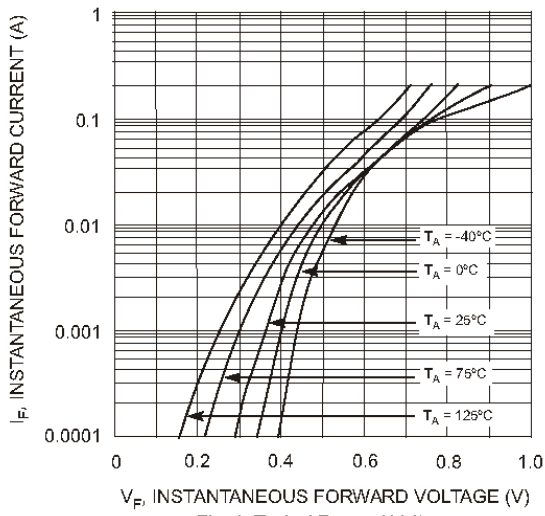


Fig. 1 Typical Forward Voltage

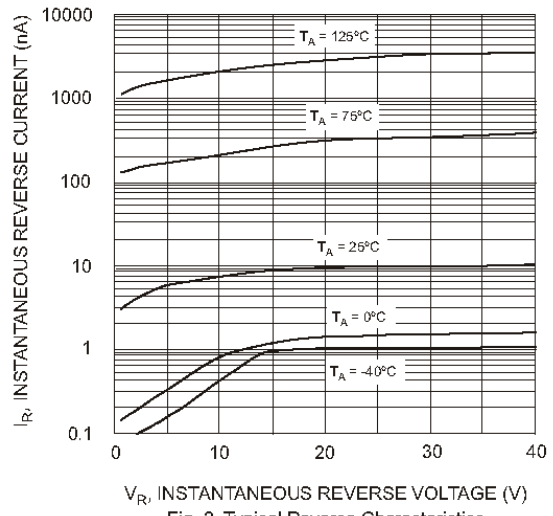


Fig. 2 Typical Reverse Characteristics

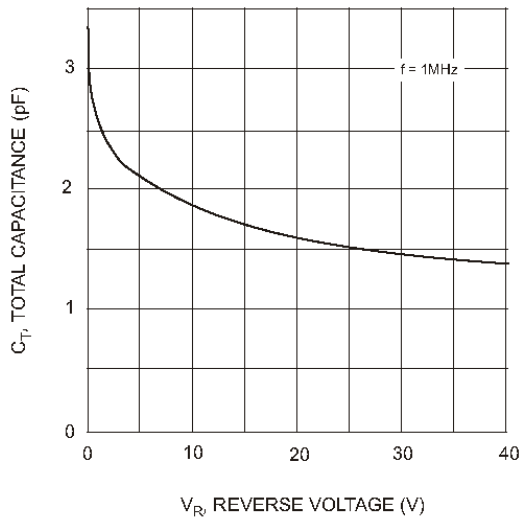


Fig. 3 Typical Capacitance

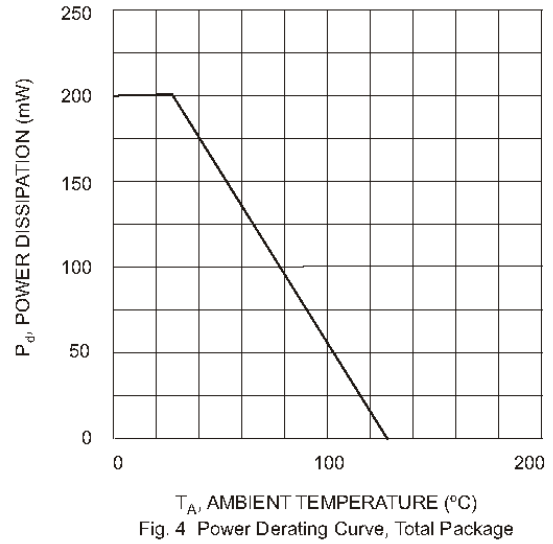
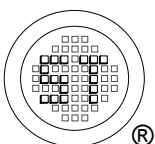


Fig. 4 Power Derating Curve, Total Package



SEMTECH ELECTRONICS LTD.
 (Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



Dated : 08/11/2007