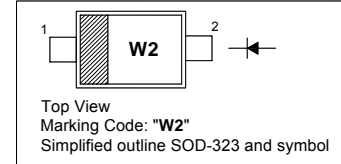


# BAW56WS

## Silicon Epitaxial Planar Switching Diode

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

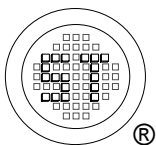


### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	85	V
Reverse Voltage	$V_R$	75	V
Continuous Forward Current	$I_F$	125	mA
Repetitive Peak Forward Current	$I_{FRM}$	450	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM}$	at $t = 1\text{ s}$ 0.5	A
		at $t = 1\text{ ms}$ 1	
		at $t = 1\text{ }\mu\text{s}$ 4	
Power Dissipation	$P_{tot}$	250	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 150	$^\circ\text{C}$

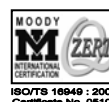
### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage	$V_F$	at $I_F = 1\text{ mA}$ 715	mV
at $I_F = 10\text{ mA}$ 855		mV	
at $I_F = 50\text{ mA}$ 1		V	
at $I_F = 150\text{ mA}$ 1.25		V	
Reverse Current	$I_R$	at $V_R = 25\text{ V}$ 30	nA
at $V_R = 75\text{ V}$ 1		$\mu\text{A}$	
at $V_R = 25\text{ V}, T_j = 150\text{ }^\circ\text{C}$ 30		$\mu\text{A}$	
at $V_R = 75\text{ V}, T_j = 150\text{ }^\circ\text{C}$ 50		$\mu\text{A}$	
Diode Capacitance	$C_d$	2	pF
Reverse Recovery Time	$t_{rr}$	4	ns
at $I_F = 10\text{ mA}, I_R = 10\text{ mA}, R_L = 100\text{ }\Omega$			

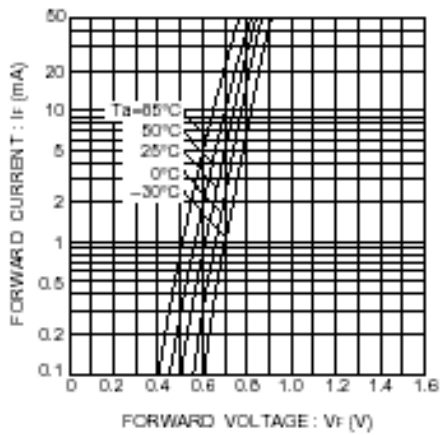


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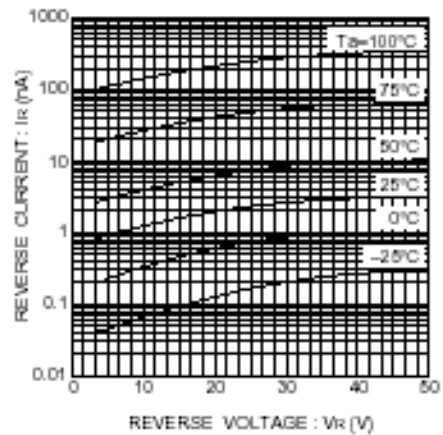
(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



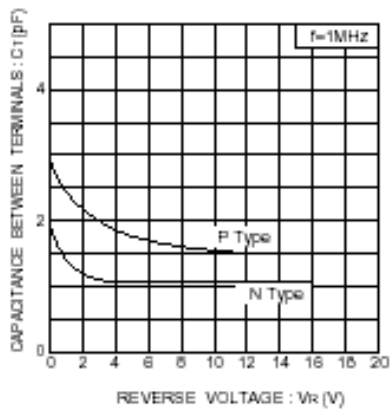
# BAW56WS



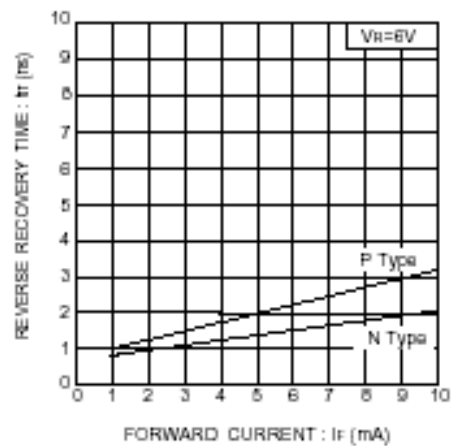
Forward characteristics



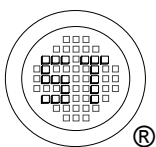
Reverse characteristics



Capacitance between terminals characteristics

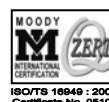


Reverse recovery time



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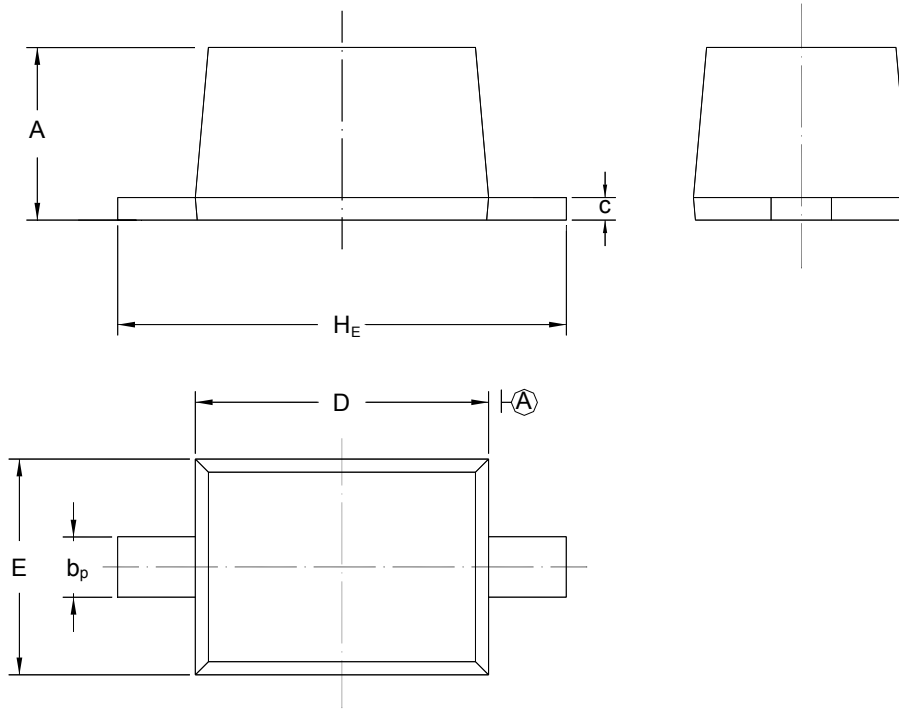


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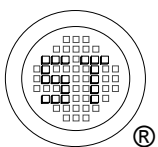
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

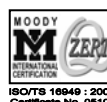
SOD-323



UNIT	A	b <sub>p</sub>	C	D	E	H <sub>E</sub>
mm	1.10 0.80	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30



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Dated : 15/06/2009