

# SDB412WS

## SILICON EPITAXIAL PLANAR SCHOTTKY BARRIER DIODE

### Features

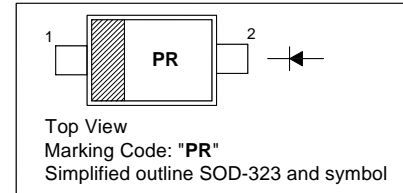
- Small surface mounting type
- Low forward voltage
- High reliability

### Applications

- Low power rectification

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

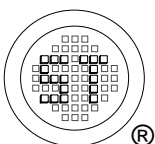


### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	40	V
Reverse Voltage	$V_R$	20	V
Average Forward Current	$I_O$	0.5	A
Peak Forward Surge Current	$I_{FSM}$	3	A
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Storage Temperature Range	$T_s$	- 40 to + 125	$^\circ\text{C}$

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

Parameter	Symbol	Typ.	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$ at $I_F = 500\text{ mA}$	$V_F$	- -	0.3 0.5	V
Reverse Current at $V_R = 10\text{ V}$ at $V_R = 40\text{ V}$	$I_R$	- -	30 200	$\mu\text{A}$
Total Capacitance at $V_R = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_T$	20	-	pF



**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



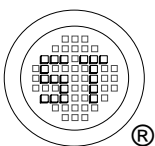
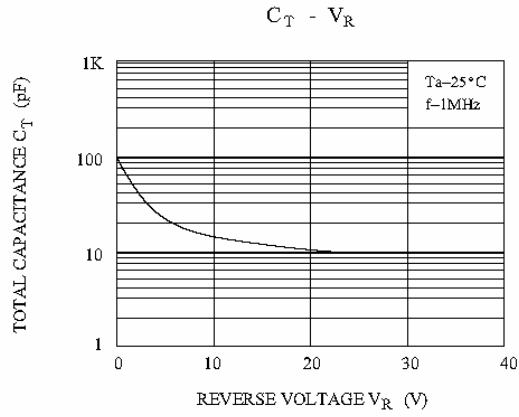
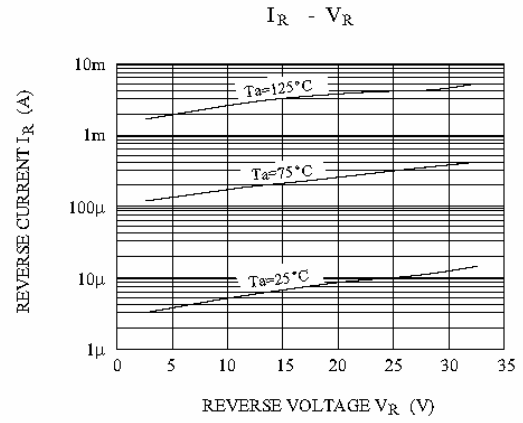
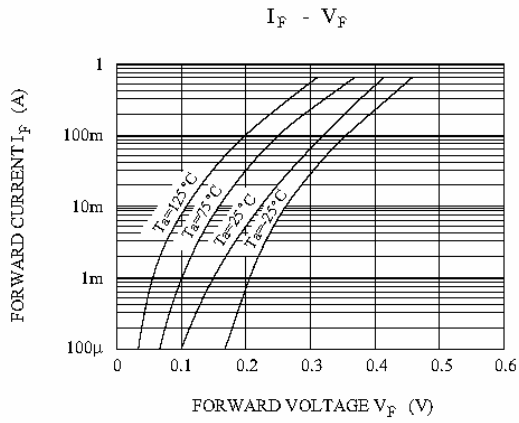
ISO 14001:2004  
Certificate No. 7116



ISO 9001:2000  
Certificate No. 0506098

Dated : 01/09/2006

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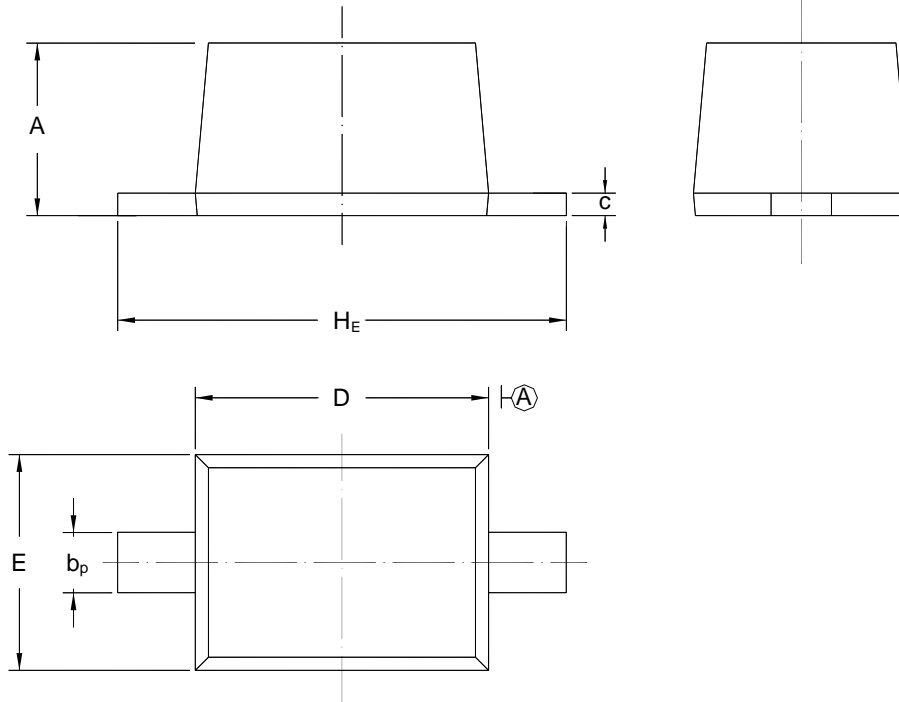
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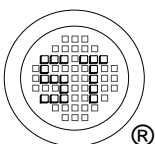
## PACKAGE OUTLINE

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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