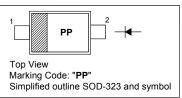
### SILICON EPITAXIAL PLANAR SCHOTTKY BARRIER DIODE

For super-high speed switching and wave detection circuit applications

#### **PINNING**

PIN	DESCRIPTION
1	Cathode
2	Anode



#### Absolute Maximum Ratings (T<sub>a</sub> = 25 °C)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V <sub>RM</sub>	30	V
Reverse Voltage	$V_R$	30	V
Forward Current	I <sub>F</sub>	30	mA
Peak Forward Current	I <sub>FM</sub>	150	mA
Junction Temperature	T <sub>j</sub>	125	°C
Storage Temperature Range	Ts	- 55 to + 125	°C

### Characteristics at $T_a = 25$ °C

Parameter	Symbol	Тур.	Max.	Unit
Forward Voltage at $I_F = 1 \text{ mA}$ at $I_F = 30 \text{ mA}$	V <sub>F</sub>		0.4 1	V
Reverse Current at V <sub>R</sub> = 30 V	I <sub>R</sub>	1	0.3	μΑ
Terminal Capacitance at V <sub>R</sub> = 1 V, f = 1 MHz	Ст	1.5	-	pF
Reverse Recovery Time at $I_F = I_R = 10$ mA, $I_{rr} = 1$ mA, $R_L = 100$ $\Omega$	t <sub>rr</sub>	1	-	ns
Detection Efficiency at $V_{in}$ = 3 $V_{(peak)}$ , f = 30 MHz, $R_L$ = 3.9 K $\Omega$ , $C_L$ = 10 pF	η	65	-	%



## SEMTECH ELECTRONICS LTD.

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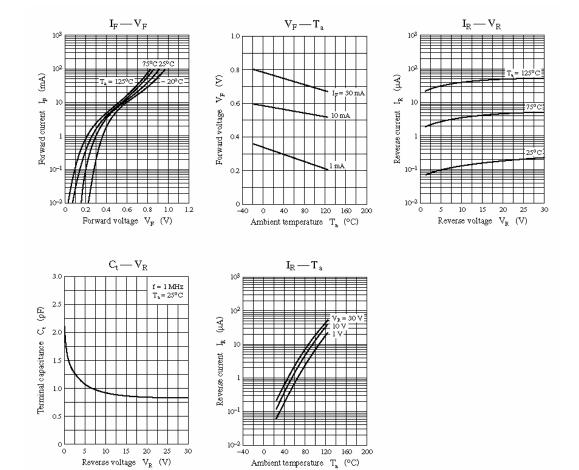








Dated: 01/09/2006



Ambient temperature T<sub>a</sub> (°C)



Reverse voltage

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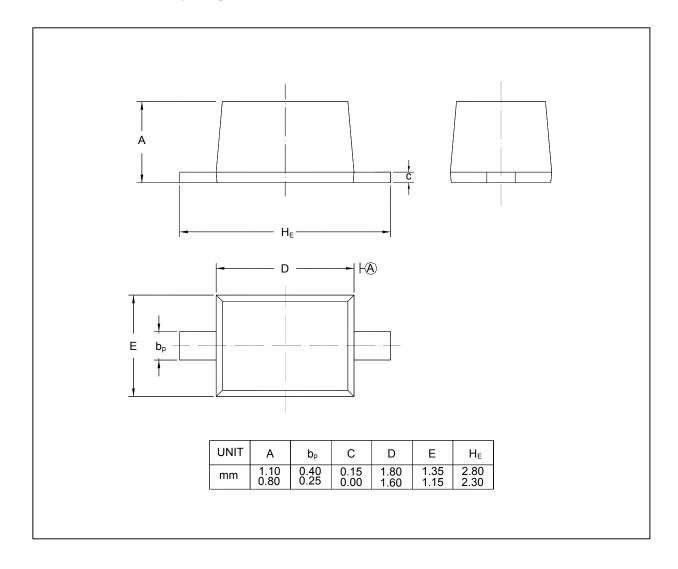


Dated: 01/09/2006

#### **PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

**SOD-323** 





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Dated: 01/09/2006