

# 1SS413

## SILICON EPITAXIAL SCHOTTKY BARRIER DIODE

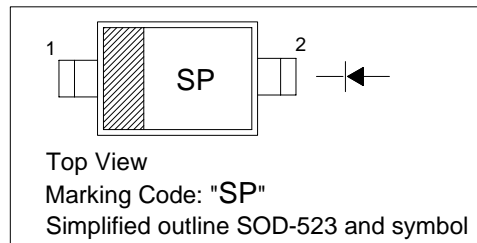
### High Speed Switching Application

#### Features

- Low forward voltage :  $V_{F(3)}=0.50V(\text{typ.})$ .
- Low reverse current :  $I_R=0.5\mu A(\text{max.})$ .
- Small total capacitance :  $C_T=3.9pF(\text{typ.})$ .

#### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



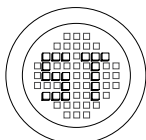
#### Absolute Maximum Ratings ( $T_j = 25^\circ C$ )

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	25	V
Reverse Voltage	$V_R$	20	V
Peak Forward Current	$I_{FM}$	100	mA
Average Forward Current	$I_O$	50	mA
Surge Current (10ms)	$I_{FSM}$	1	A
Power Dissipation (Note 1)	$P_{tot}$	100	mW
Junction Temperature	$T_J$	125	?
Storage Temperature	$T_s$	-55 to +125	?

Note 1: Mounted on a glass epoxy circuit board of 20x20 mm, pad dimension of 4x4 mm.

#### Characteristics at $T_j = 25^\circ C$

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Forward Voltage	$I_F = 1mA$	$V_{F(1)}$	-	0.33	-	V
	$I_F = 5mA$	$V_{F(2)}$	-	0.38	-	V
	$I_F = 50mA$	$V_{F(3)}$	-	0.50	0.55	V
Reverse Current	$V_R = 20V$	$I_R$	-	-	0.5	$\mu A$
Total Capacitance	$V_R = 0V, f = 1MHz$	$C_T$	-	3.9	-	pF



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РАДИОТЕХ

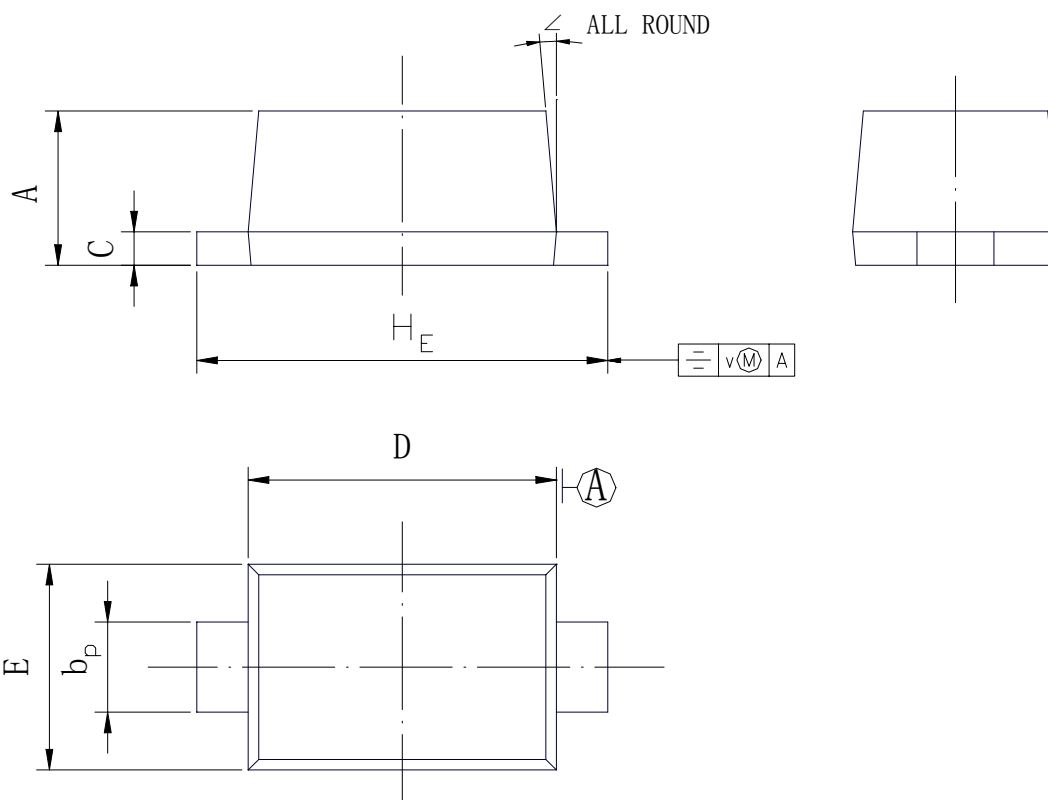
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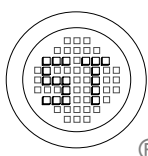
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523

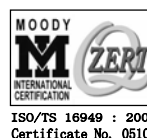


UNIT	A	b <sub>P</sub>	C	D	E	H <sub>E</sub>	v	∠
mm	0.70 0.60	0.4 0.3	0.135 0.127	1.25 1.15	0.85 0.75	1.65 1.55	0.1	5°



**SEMTECH ELECTRONICS LTD.**

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



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001  
Certificate No. 7116



ISO 9001 : 2000  
Certificate No. 020-100-0102-001

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