

## HSM126S

### Silicon Schottky Barrier Diode for System Protection

REJ03G0174-0400Z  
(Previous: ADE-208-111C)  
Rev.4.00  
Jan.28.2004

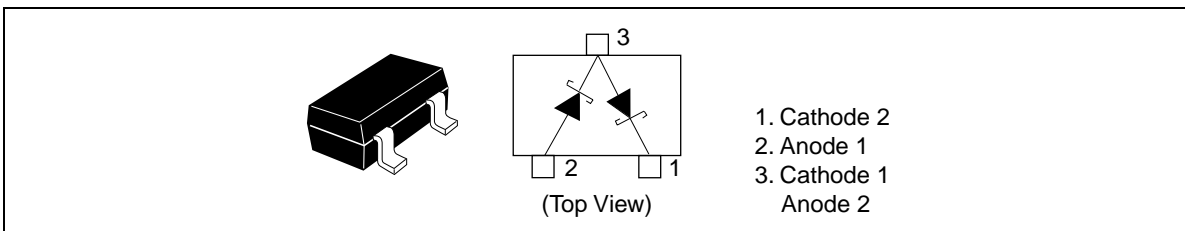
#### Features

- HSM126S which is connected in series configuration enable to protect electric systems from miss-operation against external + and – surge.
- Low  $V_F$  and low leakage current.
- MPAK Package is suitable for high density surface mounting and high speed assembly.

#### Ordering Information

Type No.	Laser Mark	Package Code
HSM126S	S14	MPAK

#### Pin Arrangement



**Absolute Maximum Ratings** \*<sup>3</sup>(T<sub>a</sub> = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>	20	V
Average forward current	I <sub>O</sub> * <sup>1</sup>	200	mA
Non-Repetitive peak forward surge current	I <sub>FSM</sub> * <sup>2</sup>	2	A
Junction temperature	T <sub>J</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-55 to +125	°C

Notes: 1. Sine wave, Two device total  
2. 50 Hz half sine wave 1 pulse  
3. Per one device

**Electrical Characteristics** \*<sup>1</sup>(T<sub>a</sub> = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	I <sub>R</sub>	—	—	2.0	μA	V <sub>R</sub> = 5 V
Forward voltage	V <sub>F</sub>	—	—	0.35	V	I <sub>F</sub> = 10 mA
Capacitance	C	—	40	—	pF	V <sub>R</sub> = 0 V, f = 1 MHz

Note: 1. Per one device

Main Characteristic

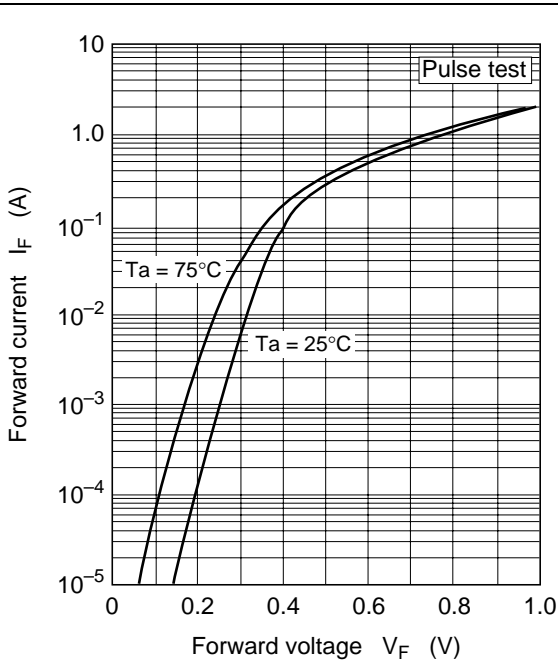


Fig.1 Forward current vs. Forward voltage

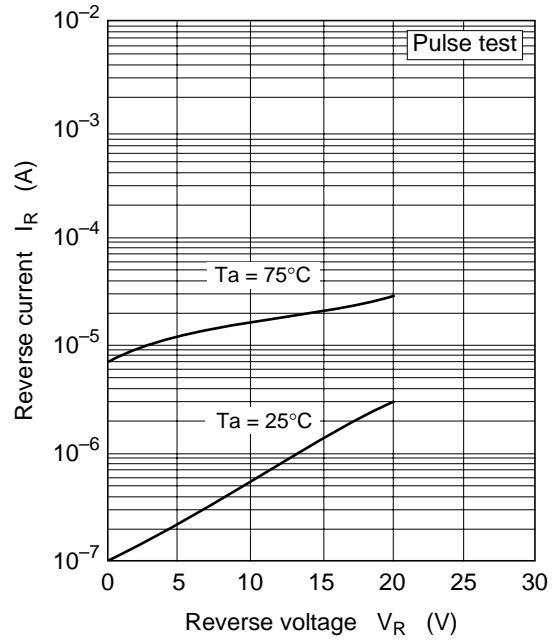


Fig.2 Reverse current vs. Reverse voltage

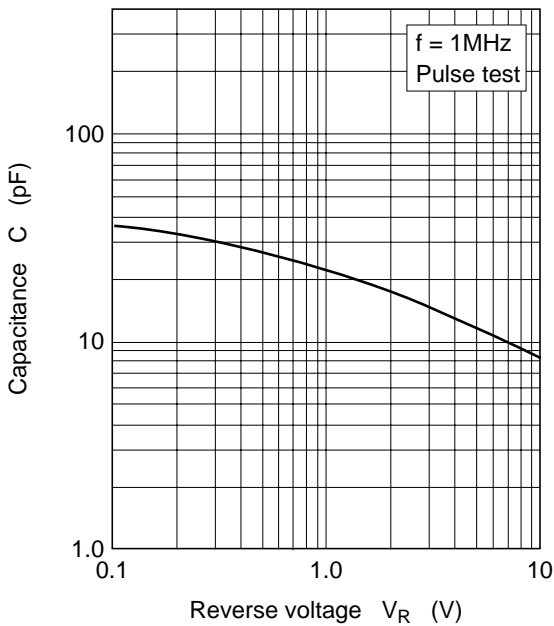
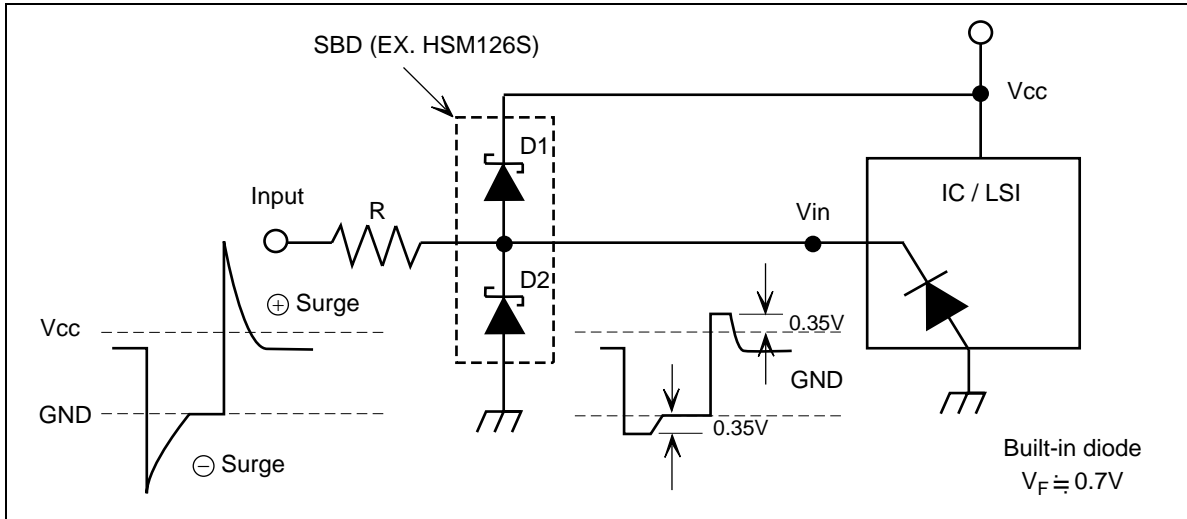


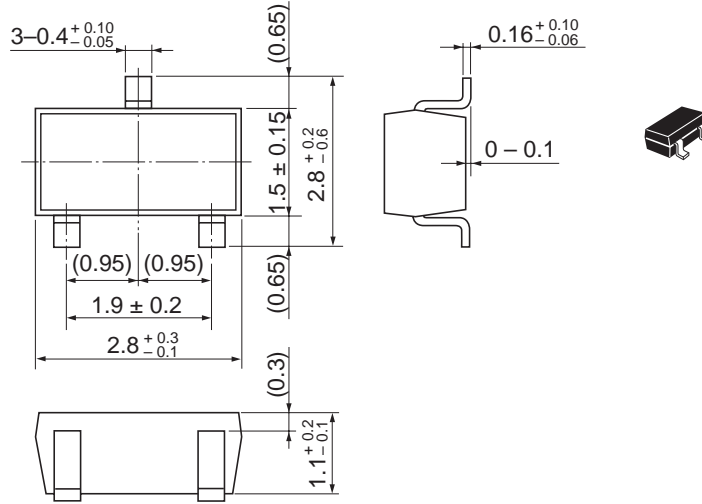
Fig.3 Capacitance vs. Reverse voltage

Example of application circuit



Package Dimensions

As of January, 2003  
Unit: mm



Package Code	MPAK
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.011 g

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