

# HSM126S

Silicon Schottky Barrier Diode for System Protection

# HITACHI

ADE-208-111C (Z)

Rev. 3

May 1995

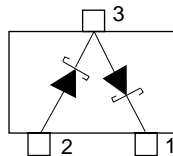
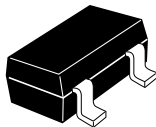
## Features

- HSM126S which is connected in series configuration enable to protect electric systems from mis-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



(Top View)

- 1 Cathode 2
- 2 Anode 1
- 3 Cathode 1  
Anode 2

## Absolute Maximum Ratings (Ta = 25°C)\*3

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	$V_{RRM}$	20	V
Average forward current	$I_O^{*1}$	200	mA
Non-Repetitive peak forward surge current	$I_{FSM}^{*2}$	2	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

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

## Electrical Characteristics (Ta = 25°C)\*

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	$I_R$	—	—	2.0	μA	$V_R = 5V$
Forward voltage	$V_F$	—	—	0.35	V	$I_F = 10mA$
Capacitance	C	—	40	—	pF	$V_R = 0V, f = 1MHz$

Note: Per one device

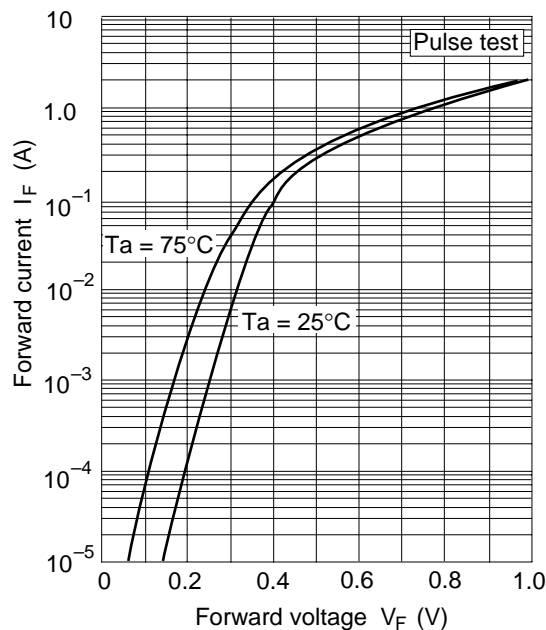
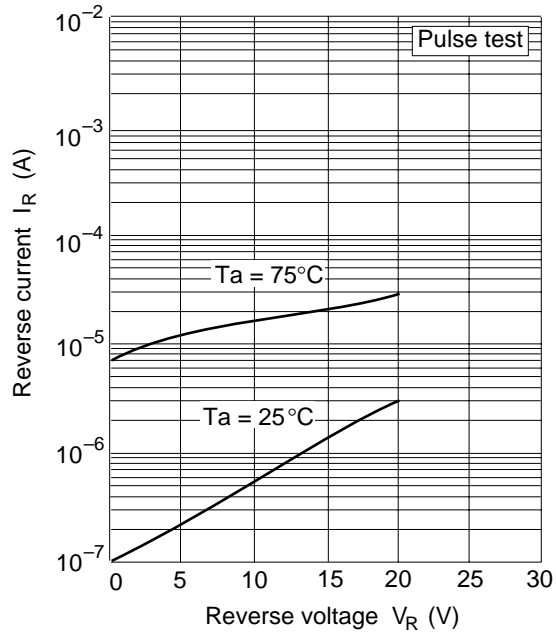
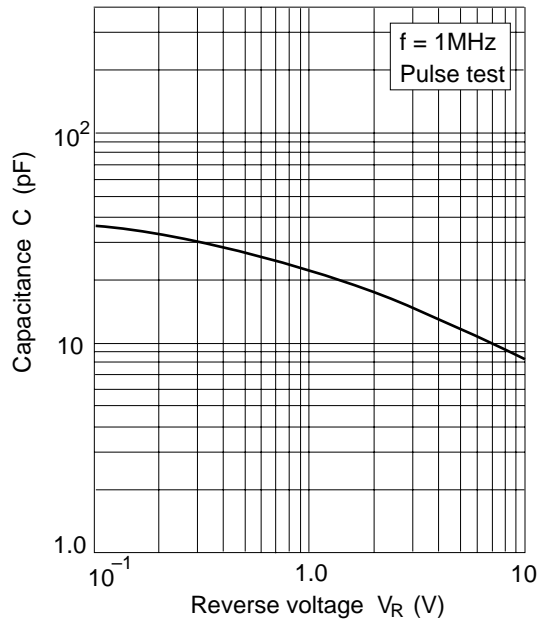


Fig.1 Forward current Vs. Forward voltage

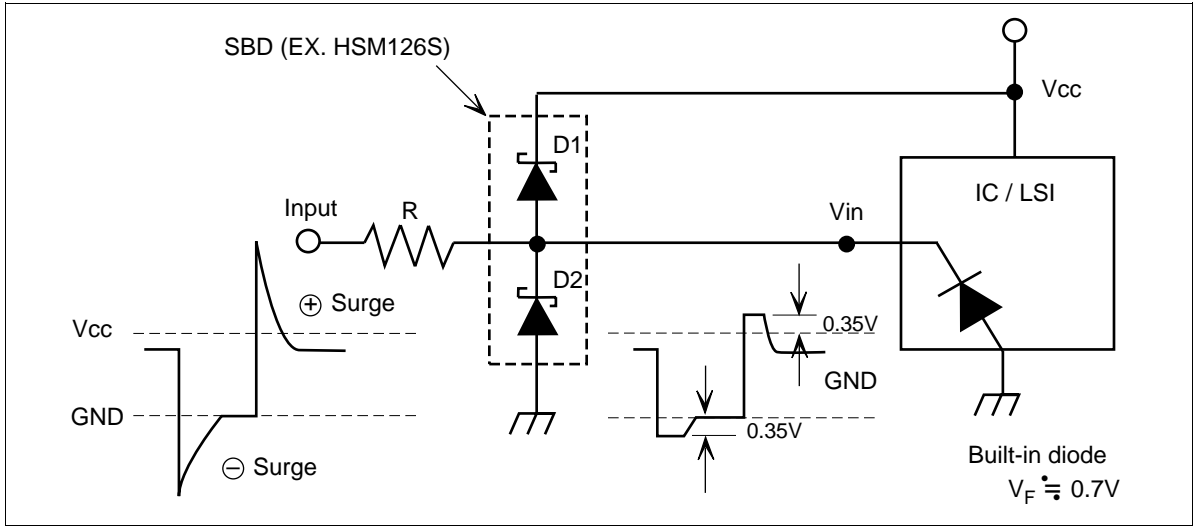


**Fig.2 Reverse current Vs. Reverse voltage**



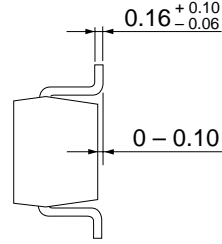
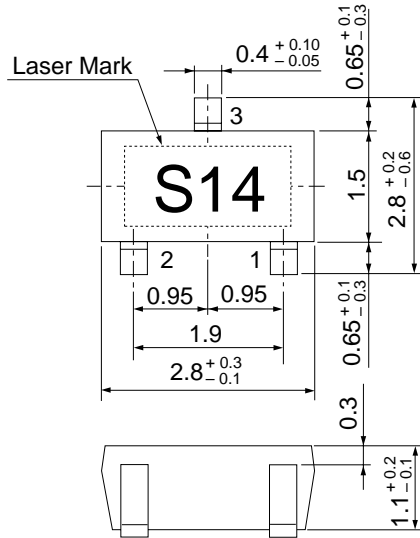
**Fig.3 Capacitance Vs. Reverse voltage**

## Example of application circuit



Package Dimensions

Unit: mm



- 1 Cathode 2
- 2 Anode 1
- 3 Cathode 1  
Anode 2

HITACHI Code	MPAK(1)
JEDEC Code	—
EIAJ Code	SC-59A
Weight (g)	0.011

## Cautions

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