HSM107S

Silicon Schottky Barrier Diode for System Protection

REJ03G0173-0700Z
(Previous: ADE-208-058F)
Rev.7.00
Jan.28.2004

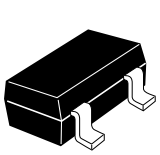
Features

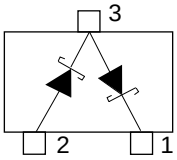
- Low V_F and high efficiency.
- HSM107S which is interconnected in series configuration is designed for protection from not only external excessive voltage but also miss-operation on electric systems.
- MPAK Package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HSM107S	C5	MPAK

Pin Arrangement





(Top View)

1. Cathode 2
2. Anode 1
3. Cathode 1
   Anode 2

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	8	V
Peak forward current	I_{FM}	0.1	A
Non-Repetitive peak forward surge current	I_{FSM} *1	0.5	A
Average forward current	I_O *2	50	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–55 to +125	°C

Notes: 1. Rectangular wave, 10 ms
2. Per one device

Electrical Characteristics *1

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	V_R	8	—	—	V	I_R = 1.0 mA
Reverse current	I_R	—	—	30	μA	V_R = 5 V
Forward voltage	V_F	—	—	0.3	V	I_F = 10 mA
ESD Capability *2	—	100	—	—	V	C = 200 pF, Both forward and reverse direction 1 pulse

Notes: 1. Per one device
2. Failure Criterion ; $I_R \geq 60$ μA at V_R = 5 V

Main Characteristic

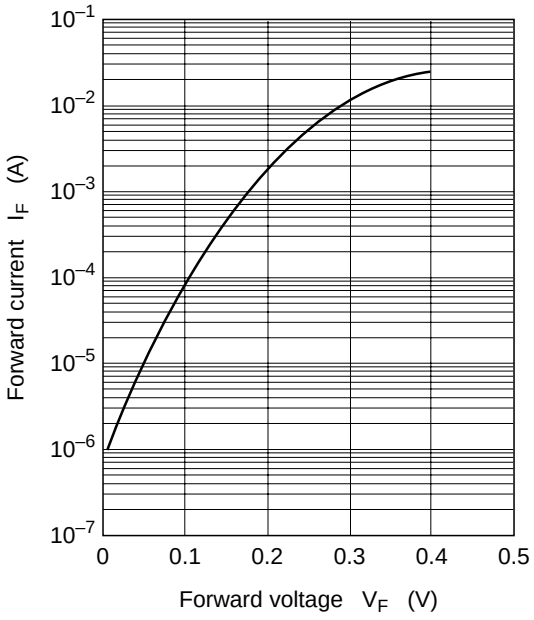


Fig.1 Forward current vs. Forward voltage

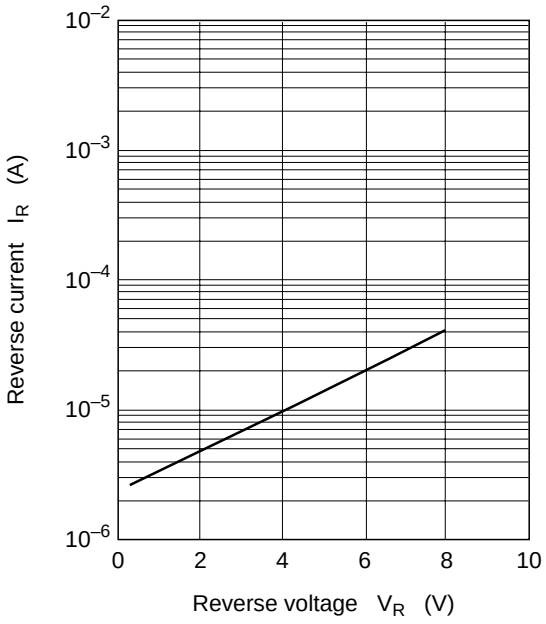


Fig.2 Reverse current vs. Reverse voltage

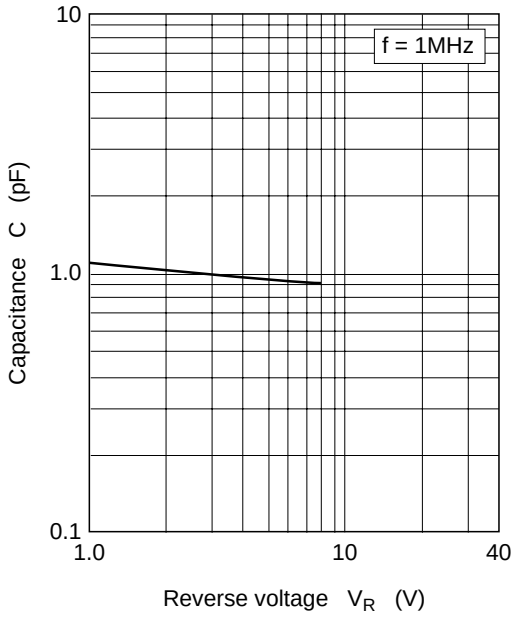
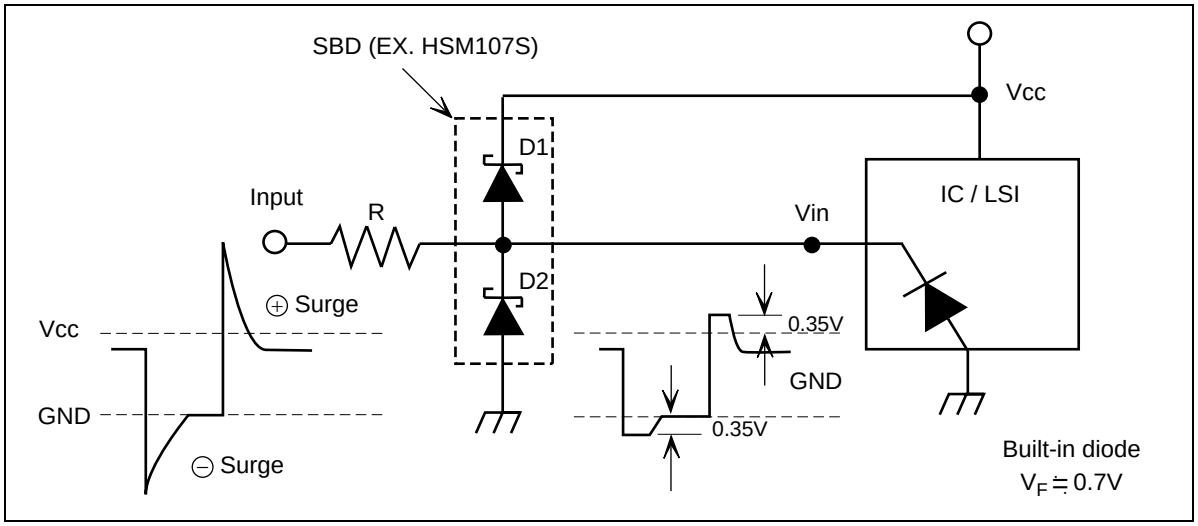


Fig.3 Capacitance vs. Reverse voltage

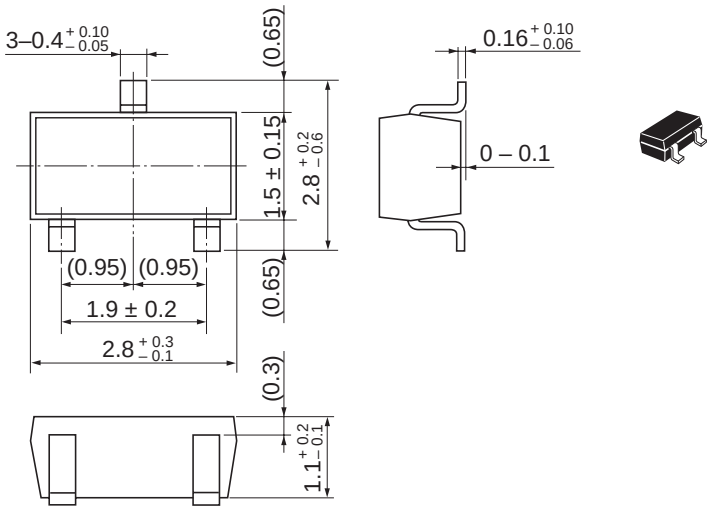
Example of application circuite



Package Dimensions

As of January, 2003

Unit: mm



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

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