

ADE-208-027C(Z)

# HSM123

## Silicon Epitaxial Planar Diode for High Speed Switching

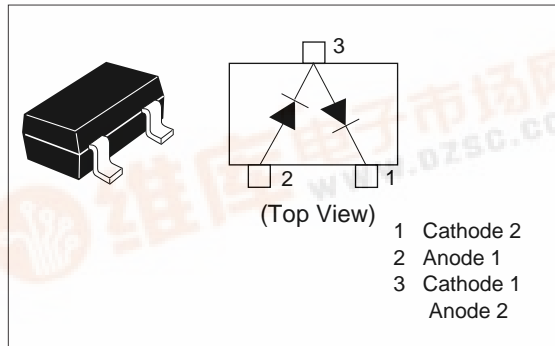
# HITACHI

Rev. 3  
Aug. 1995

### Features

- Low capacitance, proof against high voltage.
- Fast recovery time.
- MPAK package is suitable for high density surface mounting and high speed assembly.

### Pin Arrangement



### Ordering Information

Type No.	Laser Mark	Package Code
HSM123	A 9	MPAK

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

Item	Symbol	Value	Unit
Peak reverse voltage	$V_{RM}$	85	V
Reverse voltage	$V_R$	80	V
Peak forward current	$I_{FM}$	300	mA
Non-Repetitive peak forward surge current	$I_{FSM}^*$	4	A
Average forward current	$I_o$	100	mA
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

\* Within 1μs forward surge current.

\*\* Per one device

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

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_{F1}$	—	0.70	1.0	V	$I_F = 10 \text{ mA}$
	$V_{F2}$	—	0.79	1.0		$I_F = 50 \text{ mA}$
	$V_{F3}$	—	0.85	1.2		$I_F = 100 \text{ mA}$
Reverse current	$I_R$	—	—	0.1	μA	$V_R = 80 \text{ V}$
Capacitance	C	—	1.0	4.0	pF	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$
Reverse recovery time	$t_{rr}$	—	—	3.0	ns	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}, R_L = 50 \Omega$

\* Per one device

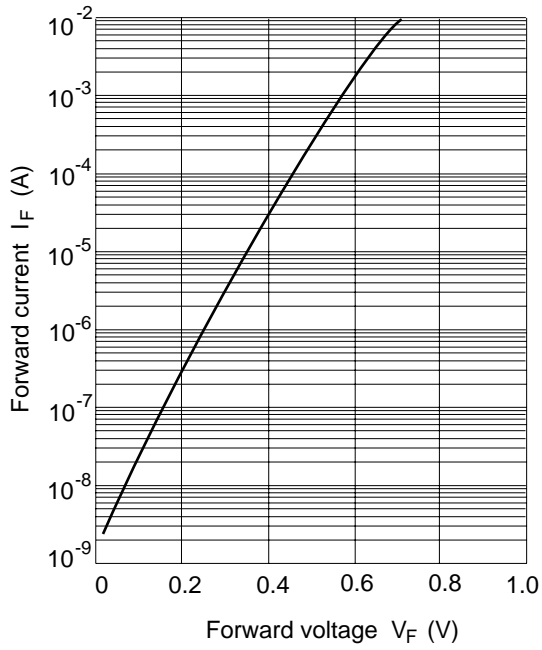


Fig.1 Forward current Vs. Forward voltage

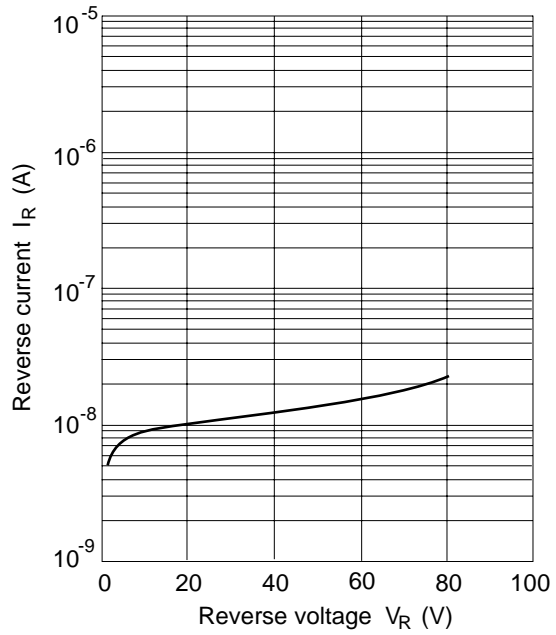


Fig.2 Reverse current Vs. Reverse voltage

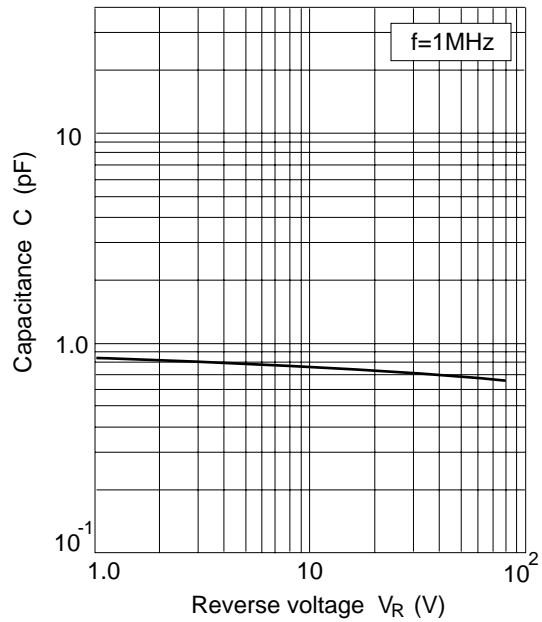


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm

