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# HSM223C

Silicon Epitaxial Planar Diode for High Speed Switching

## HITACHI

ADE-208-092C (Z)  
Rev. 3  
Aug. 1995

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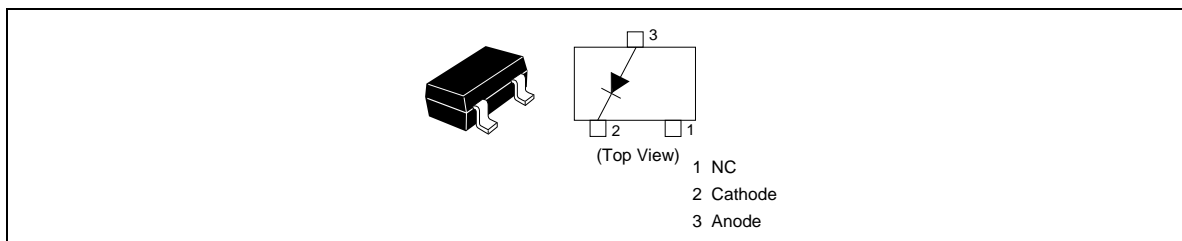
### Features

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

### Ordering Information

Type No.	Laser Mark	Package Code
HSM223C	A8	MPAK

### Pin Arrangement



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### 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	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

Note: Within 1μs forward surge current.

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

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_{F1}$	—	0.76	1.0	V	$I_F = 10\text{mA}$
	$V_{F2}$	—	0.88	1.0		$I_F = 50\text{mA}$
	$V_{F3}$	—	0.97	1.2		$I_F = 100\text{mA}$
Reverse current	$I_R$	—	—	0.1	μA	$V_R = 80\text{V}$
Capacitance	C	—	0.5	2.0	pF	$V_R = 0\text{V}$ , f = 1MHz
Reverse recovery time	$t_{rr}$	—	—	3.0	ns	$I_F = 10\text{mA}$ , $V_R = 6\text{V}$ , $R_L = 50\Omega$

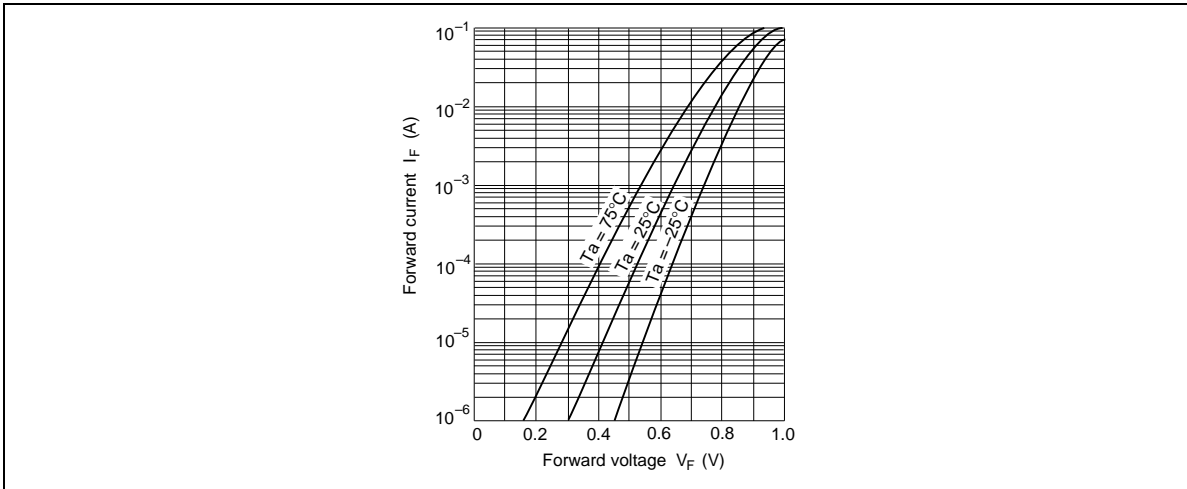


Fig.1 Forward current Vs. Forward voltage

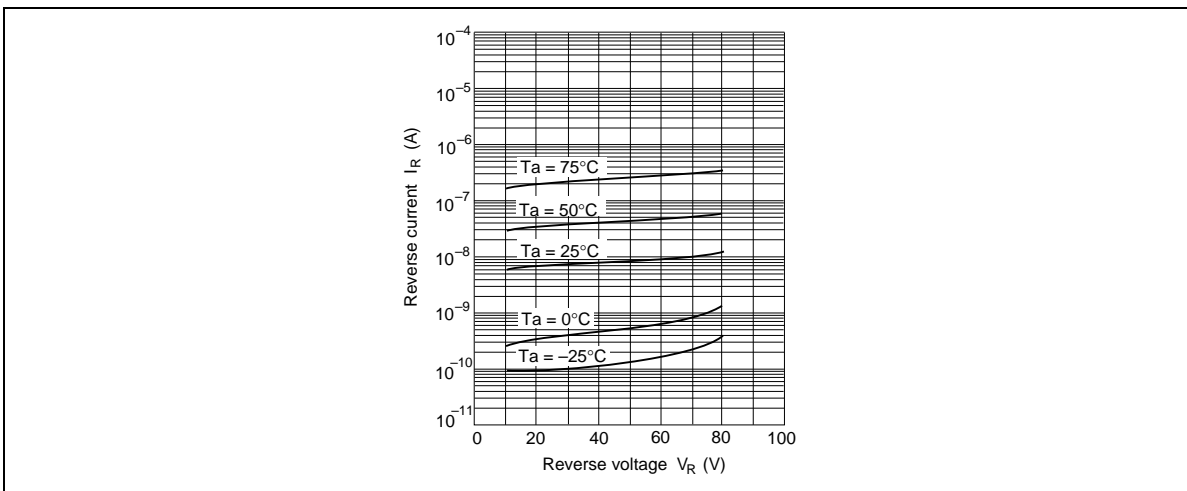
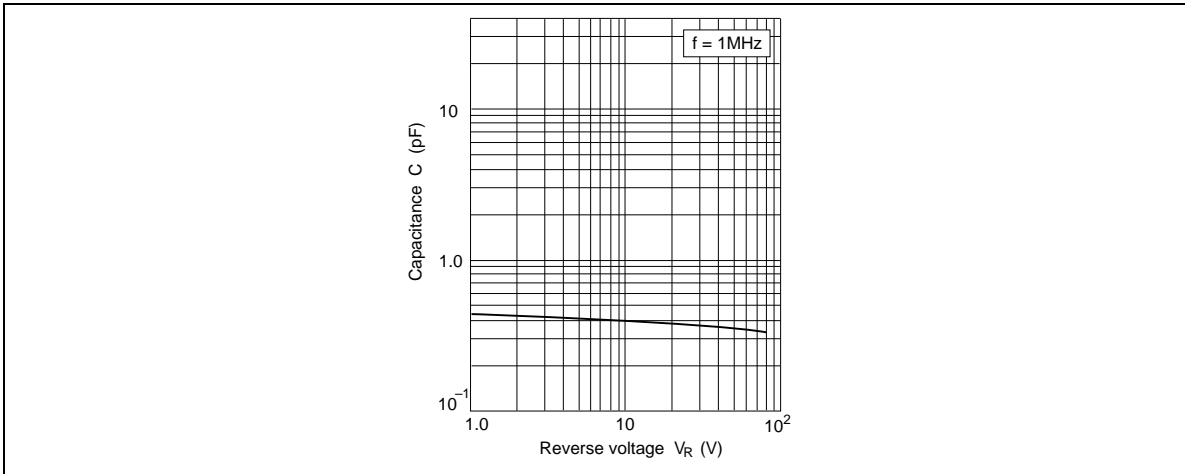


Fig.2 Reverse current Vs. Reverse voltage

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

## Package Dimensions

