

# HSM223C

Silicon Epitaxial Planar Diode for High Speed Switching

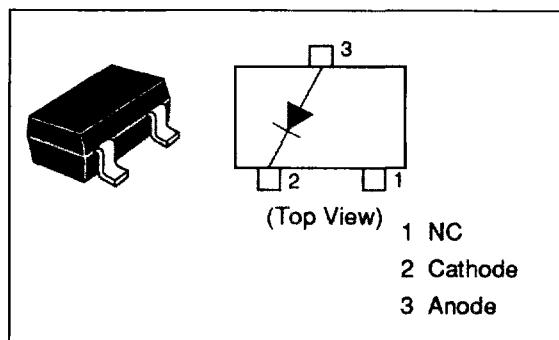
## Features

- 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	A 8	MPAK

## Pin Arrangement



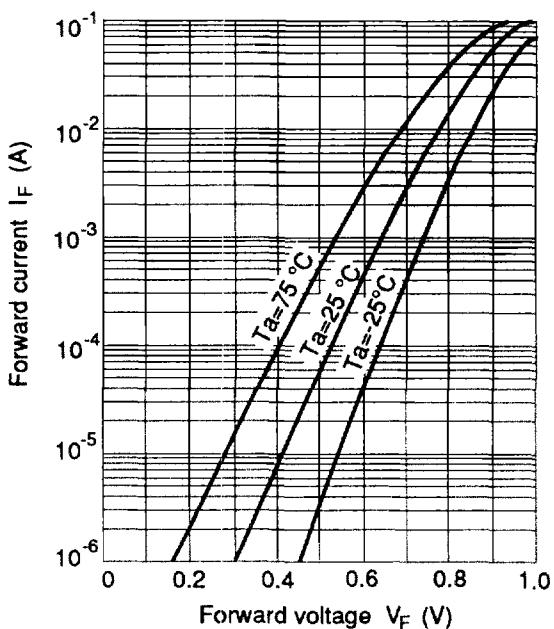
## Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

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	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

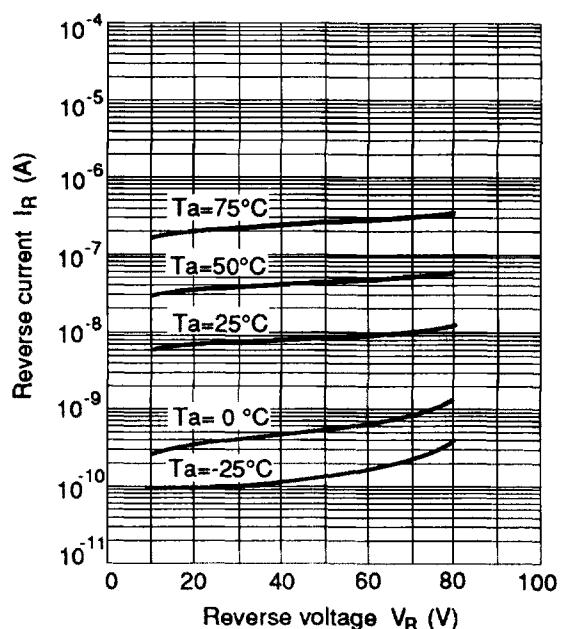
\* Within 1μs forward surge current.

## Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

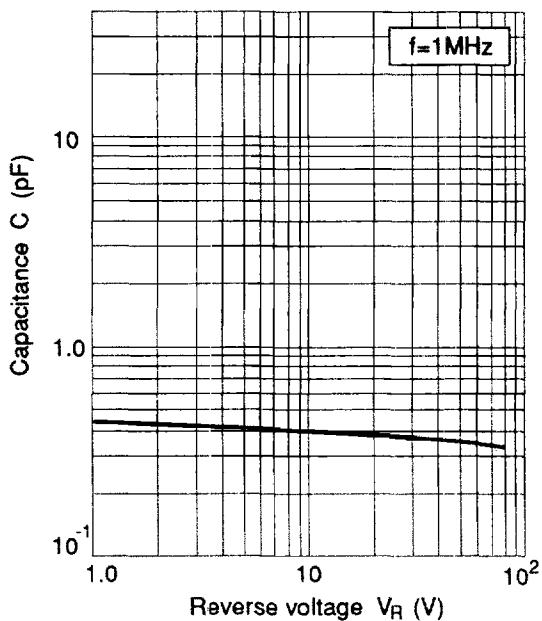
Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_{F1}$	—	0.76	1.0		$I_F = 10 \text{ mA}$
	$V_{F2}$	—	0.88	1.0	V	$I_F = 50 \text{ mA}$
	$V_{F3}$	—	0.97	1.2		$I_F = 100 \text{ mA}$
Reverse current	$I_R$	—	—	0.1	$\mu\text{A}$	$V_R = 80 \text{ V}$
Capacitance	C	—	0.5	2.0	pF	$V_R = 0 \text{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



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