

# HSM83

Silicon Epitaxial Planar Diode for High Voltage Switching

# HITACHI

ADE-208-091D(Z)

Rev 4

Jun. 1996

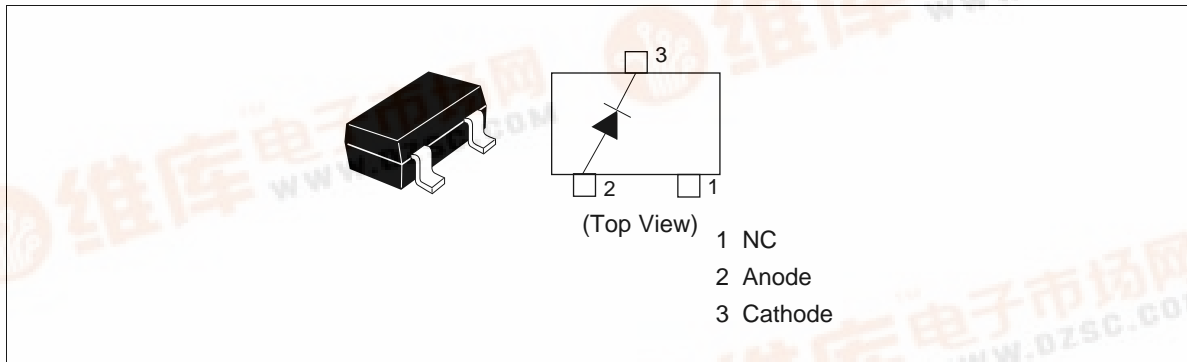
## Features

- High reverse voltage. ( $V_R = 250V$ )
- MPAK package is suitable for high density surface mounting and high speed assembly.

## Ordering Information

Type No.	Laser Mark	Package Code
HSM83	F7	MPAK

## Outline



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## HSM83

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

Item	Symbol	Value	Unit
Peak reverse voltage	$V_{RM}$	300	V
Reverse voltage	$V_R$	250	V
Peak forward current	$I_{FM}$	300	mA
Non-Repetitive peak forward surge current	$I_{FSM}^{*1}$	2	A
Average rectified current	$I_O$	100	mA
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

Note: 1. Value at duration of 10msec.

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

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	—	—	1.2	V	$I_F = 100 \text{ mA}$
Reverse current	$I_{R1}$	—	—	0.2	$\mu\text{A}$	$V_R = 250\text{V}$
	$I_{R2}$	—	—	100		$V_R = 300\text{V}$
Capacitance	$C$	—	1.5	3.0	pF	$V_R = 0\text{V}, f = 1 \text{ MHz}$
Reverse recovery time	$t_{rr}$	—	—	100	ns	$I_F = I_R = 30 \text{ mA}, I_{rr} = 3\text{mA}, R_L = 100\Omega$

Main Characteristic

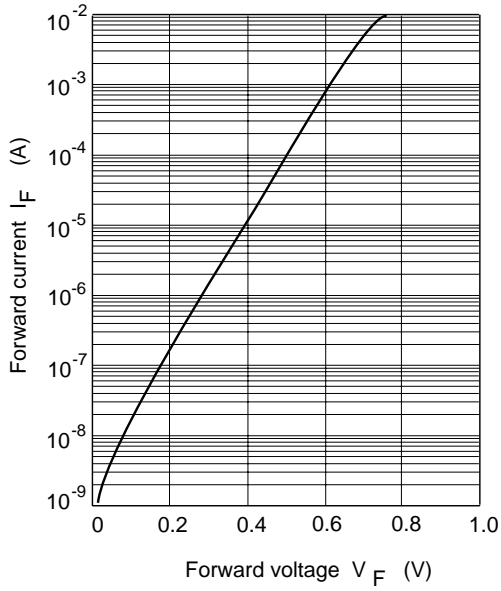


Fig.1 Forward current Vs. Forward voltage

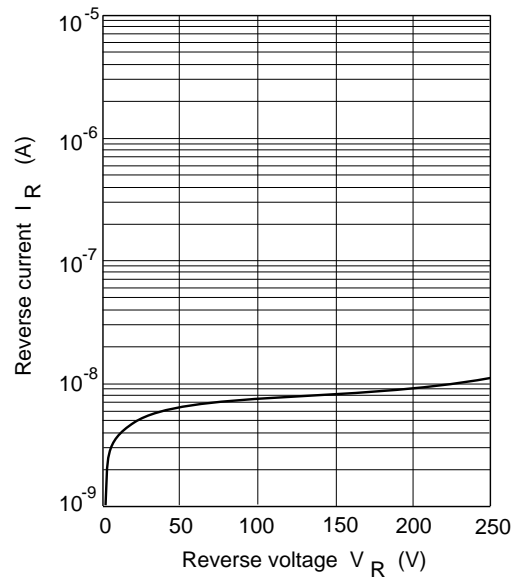


Fig.2 Reverse current Vs. Reverse voltage

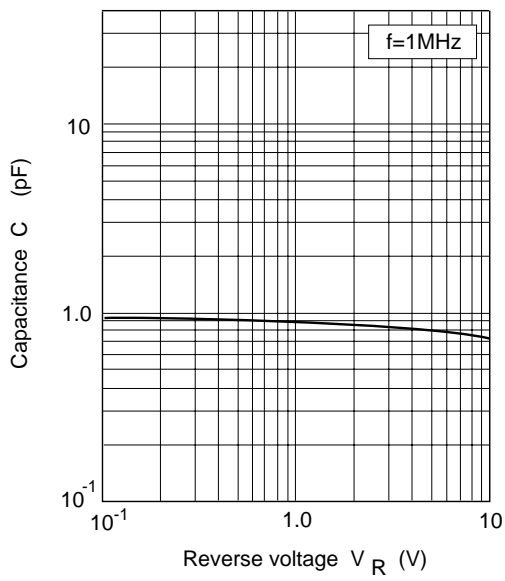
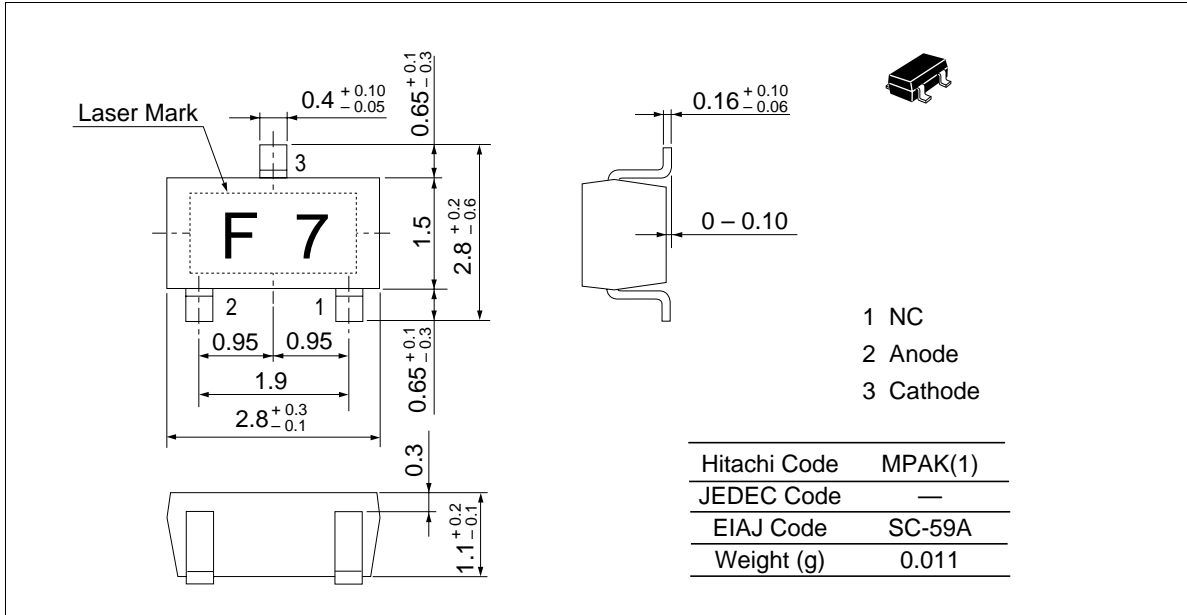


Fig.3 Capacitance Vs. Reverse voltage

# HSM83

## Package Dimensions

Unit : mm



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