

HSM83

Silicon Epitaxial Planar Diode for High Voltage Switching

HITACHI

Rev. 3
Aug. 1995

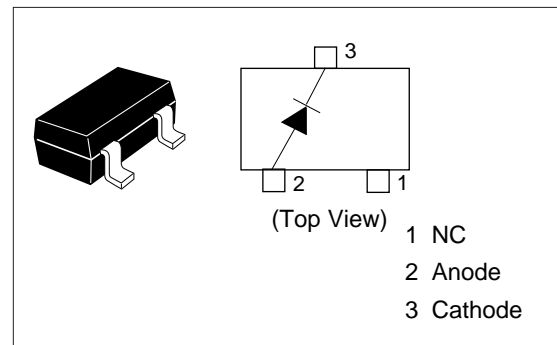
Features

- 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	F 7	MPAK

Pin Arrangement



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

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}^*	2	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 10ms forward surge current.

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

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	μA	$V_R = 250\text{ V}$
	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	$I_F=I_R=30\text{ mA}, I_{rr}=3\text{ mA}, R_L=100\Omega$

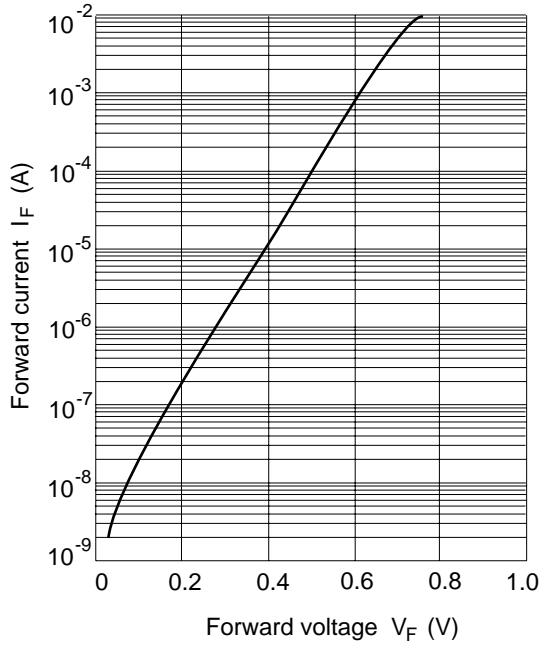


Fig.1 Forward current Vs. Forward voltage

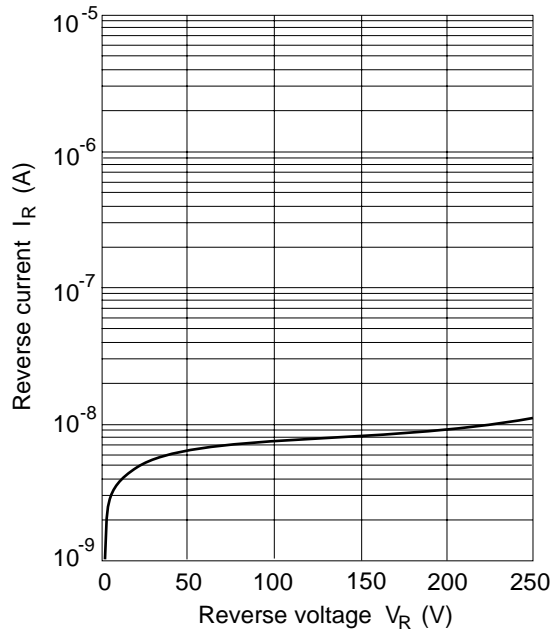


Fig.2 Reverse current Vs. Reverse voltage

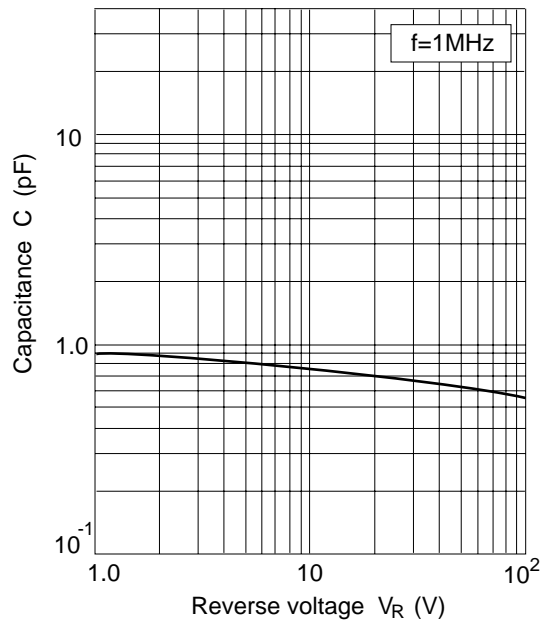


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm

