

HSM83

Silicon Epitaxial Planar Diode for High Voltage Switching

HITACHI

ADE-208-091D(Z)

Rev 4

Jun. 1996

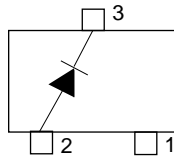
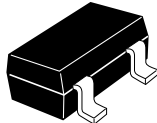
Features

- 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



(Top View)

- 1 NC
- 2 Anode
- 3 Cathode

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}^{*1}	2	A
Average rectified current	I_O	100	mA
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

Note: 1. Value at duration of 10msec.

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

Main Characteristic

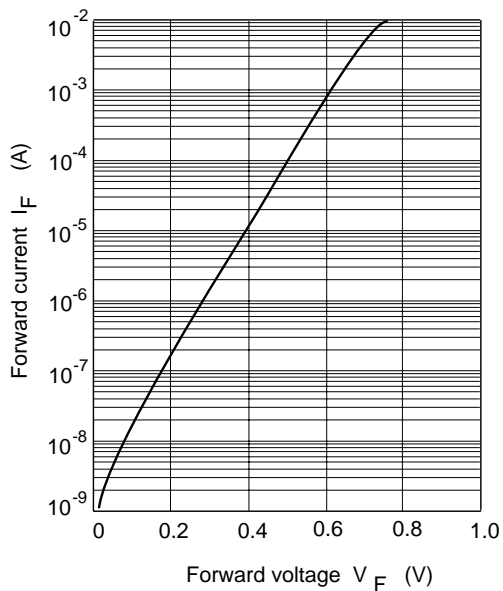


Fig.1 Forward current Vs. Forward voltage

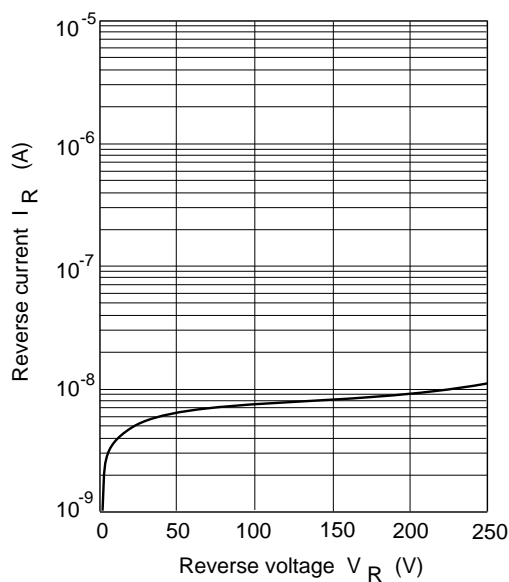


Fig.2 Reverse current Vs. Reverse voltage

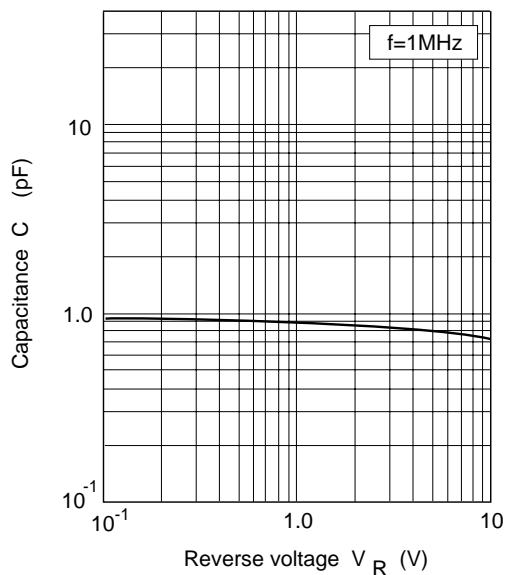
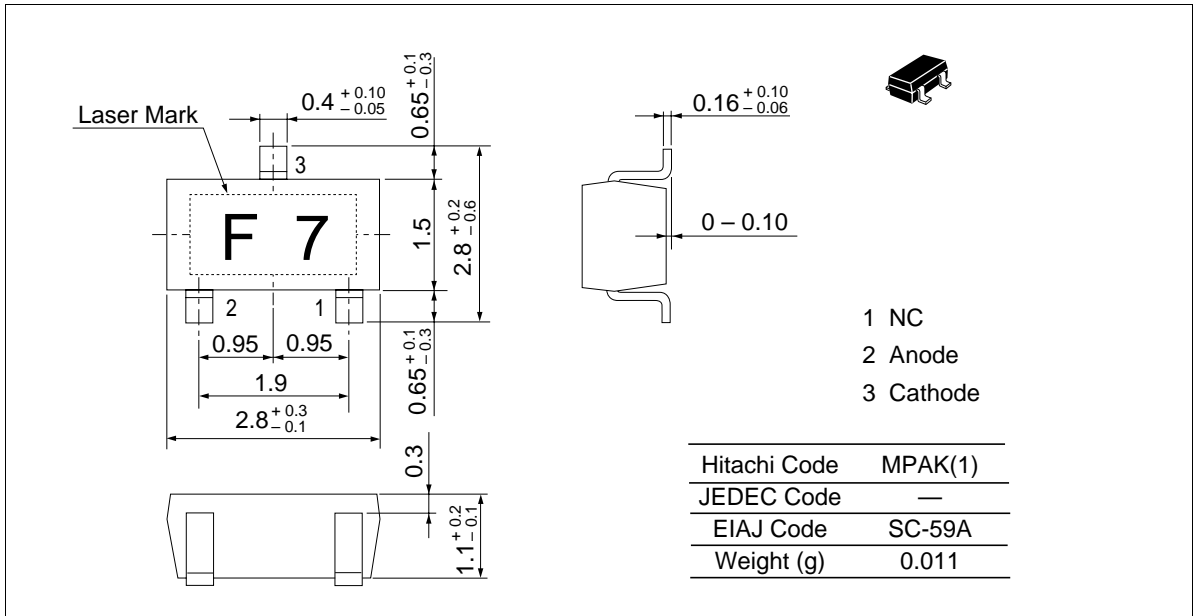


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit : mm



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