

HSM123

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

Rev. 3
Aug. 1995

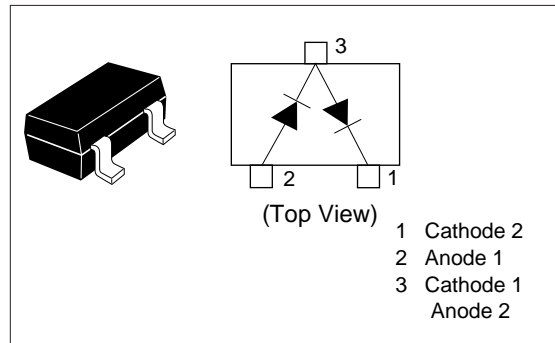
Features

- 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
HSM123	A 9	MPAK

Pin Arrangement



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	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

* Within 1 μ s forward surge current.

** Per one device

Electrical Characteristics * (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	—	0.70	1.0	V	$I_F = 10$ mA
	V_{F2}	—	0.79	1.0		$I_F = 50$ mA
	V_{F3}	—	0.85	1.2		$I_F = 100$ mA
Reverse current	I_R	—	—	0.1	μ A	$V_R = 80$ V
Capacitance	C	—	1.0	4.0	pF	$V_R = 0$ V, $f = 1$ MHz
Reverse recovery time	t_{rr}	—	—	3.0	ns	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 50\Omega$

* Per one device

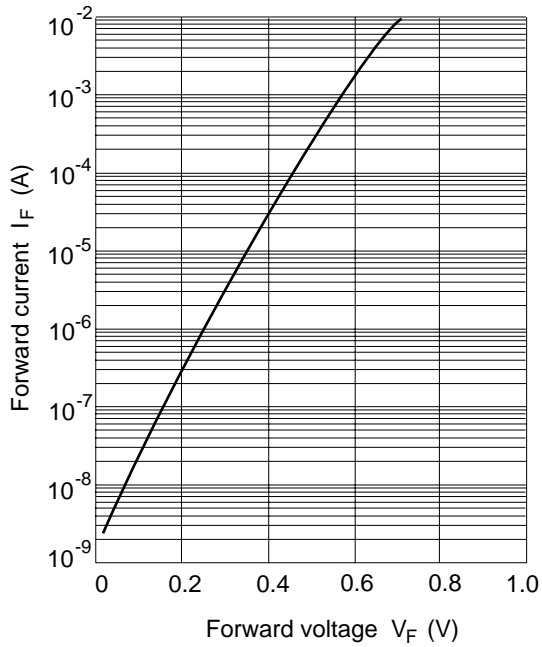


Fig.1 Forward current Vs. Forward voltage

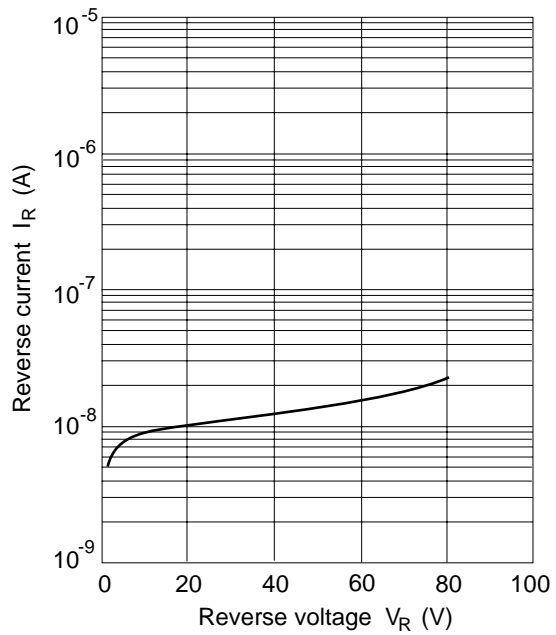


Fig.2 Reverse current Vs. Reverse voltage

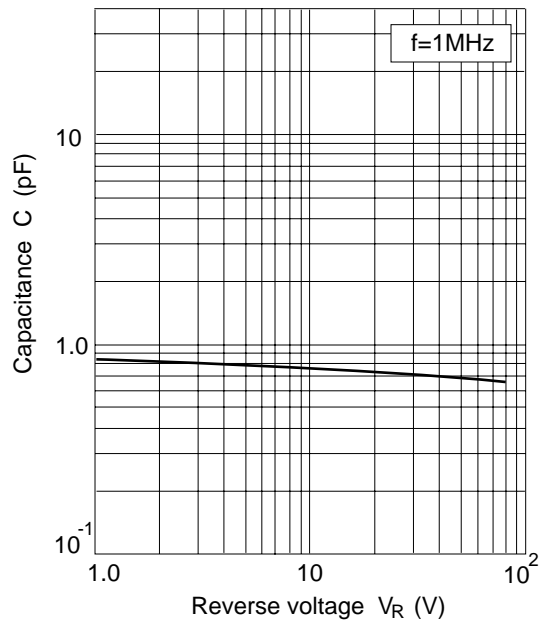


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm

