
HSM123

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

ADE-208-027C (Z)

Rev. 3

Aug. 1995

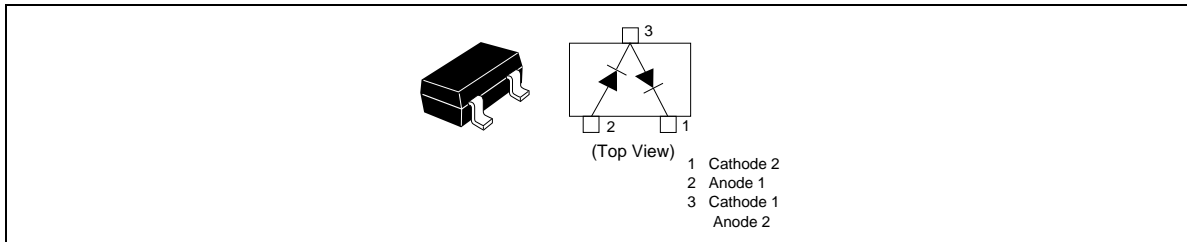
Features

- 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	A9	MPAK

Pin Arrangement



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Absolute Maximum Ratings*² (T_a = 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} ^{*1}	4	A
Average forward current	I _O	100	mA
Junction temperature	T _J	125	°C
Storage temperature	T _{stg}	-55 to +125	°C

Notes: 1. Within 1μs forward surge current.

2. Per one device

Electrical Characteristics* (T_a = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V _{F1}	—	0.70	1.0	V	I _F = 10mA
	V _{F2}	—	0.79	1.0		I _F = 50mA
	V _{F3}	—	0.85	1.2		I _F = 100mA
Reverse current	I _R	—	—	0.1	μA	V _R = 80V
Capacitance	C	—	1.0	4.0	pF	V _R = 0V, f = 1MHz
Reverse recovery time	t _{rr}	—	—	3.0	ns	I _F = 10mA, V _R = 6V, R _L = 50Ω

Note: Per one device

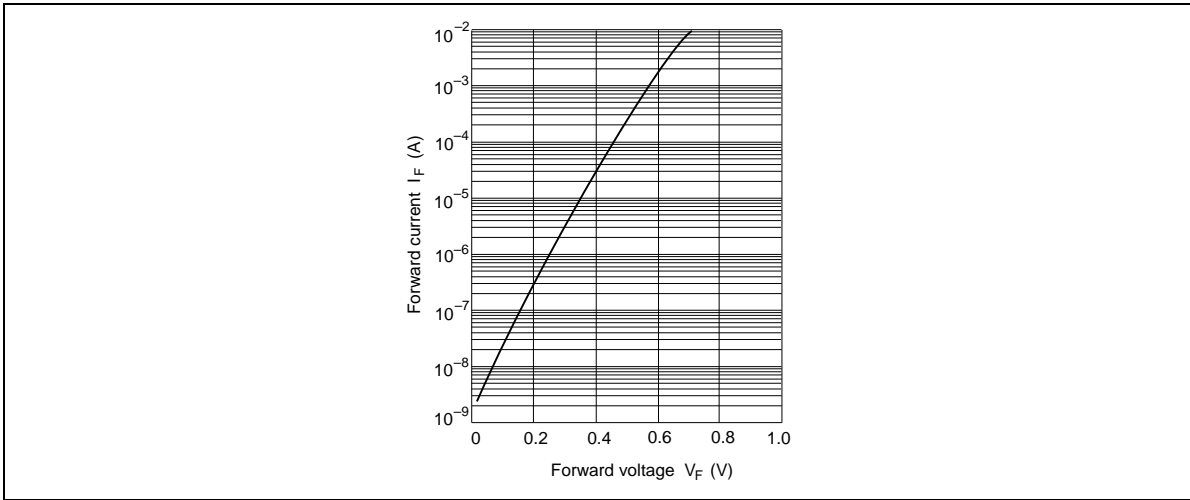


Fig.1 Forward current Vs. Forward voltage

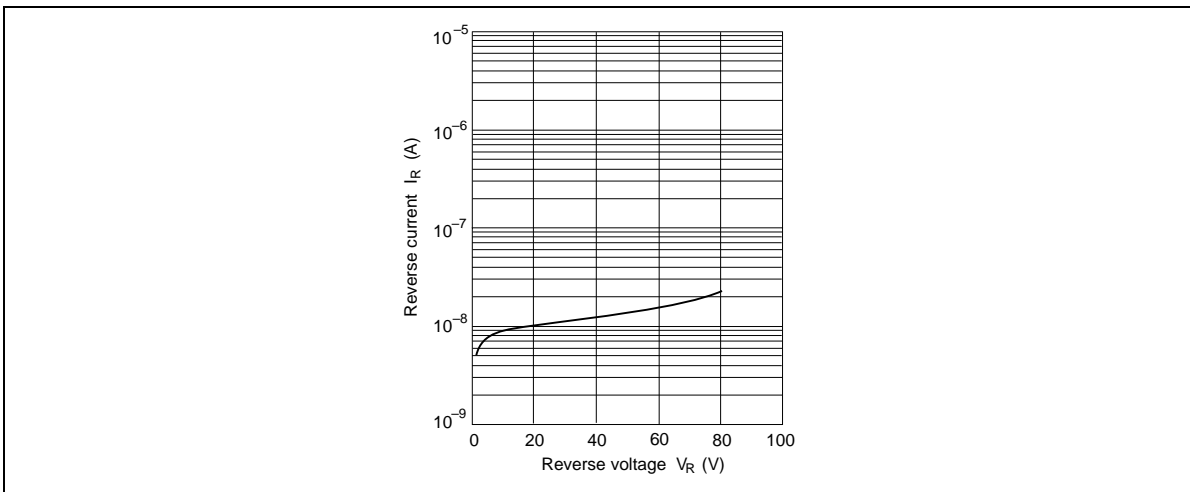


Fig.2 Reverse current Vs. Reverse voltage

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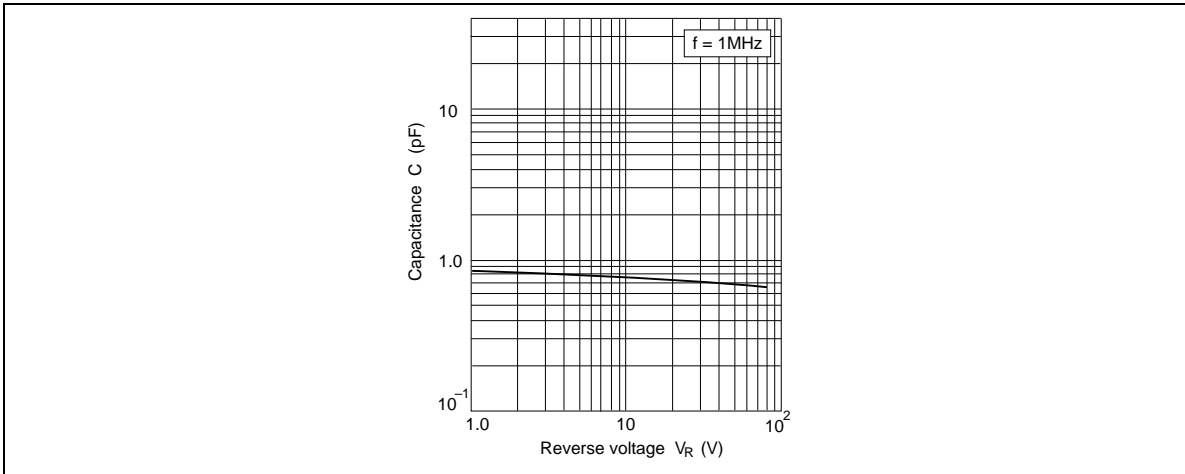


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

