ADE-208-092C(Z)

HSM223C
Silicon Epitaxial Planar Diode for High Speed Switching

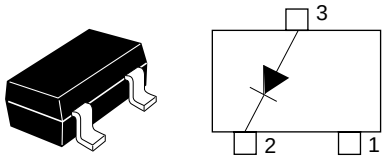
HITACHI

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.

Pin Arrangement



(Top View)

1 NC
2 Cathode
3 Anode

Ordering Information

Type No.	Laser Mark	Package Code
HSM223C	A 8	MPAK

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 1µs forward surge current.

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	—	0.76	1.0	V	I_F = 10 mA
	V_{F2}	—	0.88	1.0		I_F = 50 mA
	V_{F3}	—	0.97	1.2		I_F = 100 mA
Reverse current	I_R	—	—	0.1	µA	V_R = 80 V
Capacitance	C	—	0.5	2.0	pF	V_R = 0 V, f = 1 MHz
Reverse recovery time	trr	—	—	3.0	ns	I_F= 10mA, V_R=6V, R_L=50Ω

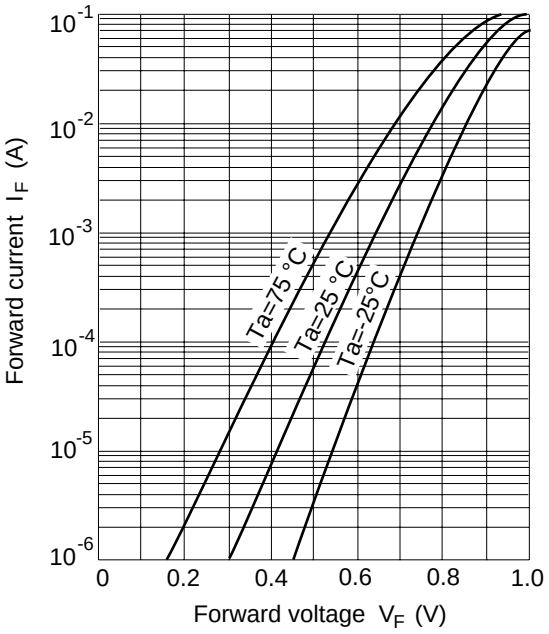


Fig.1 Forward current Vs. Forward voltage

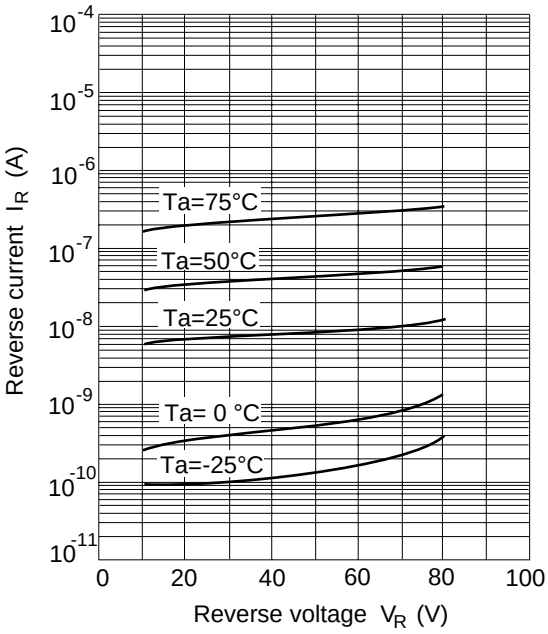


Fig.2 Reverse current Vs. Reverse voltage

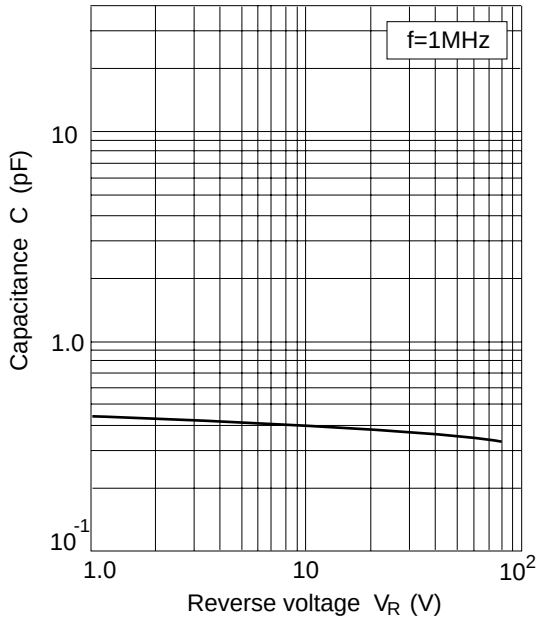
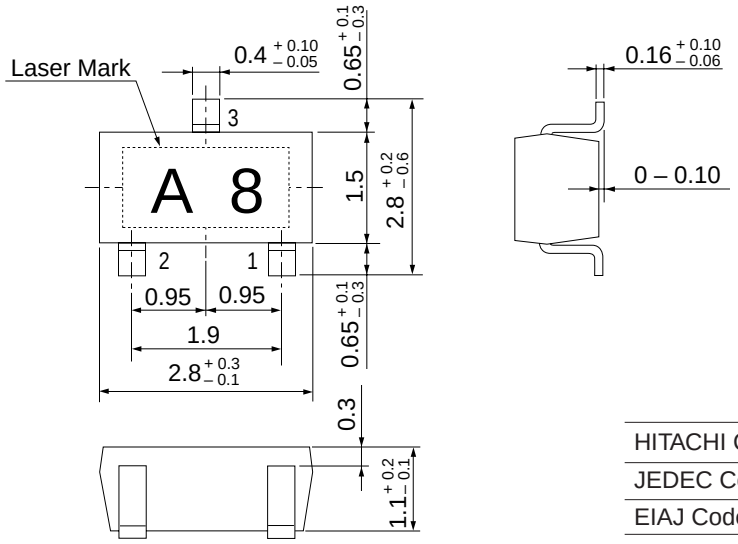


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



1 NC
2 Cathode
3 Anode

HITACHI Code	MPAK(1)
JEDEC Code	—
EIAJ Code	SC-59A
Weight (g)	0.011