HSM221C

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

ADE-208-028C (Z)
Rev. 3

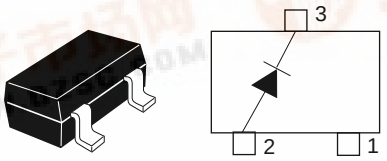
Features

- 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
HSM221C	A2	MPAK

Pin Arrangement



(Top View)

1 NC
2 Anode
3 Cathode

HSM221C

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	Tj	125	°C
Storage temperature	Tstg	–55 to +125	°C

Note: 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 = 10mA
	V_{F2}	—	0.88	1.0		I_F = 50mA
	V_{F3}	—	0.97	1.2		I_F = 100mA
Reverse current	I_R	—	—	0.1	μA	V_R = 80V
Capacitance	C	—	0.5	2.0	pF	V_R = 0V, f = 1MHz
Reverse recovery time	t_{rr}	—	—	3.0	ns	I_F = 10mA, V_R = 6V, R_L = 50Ω

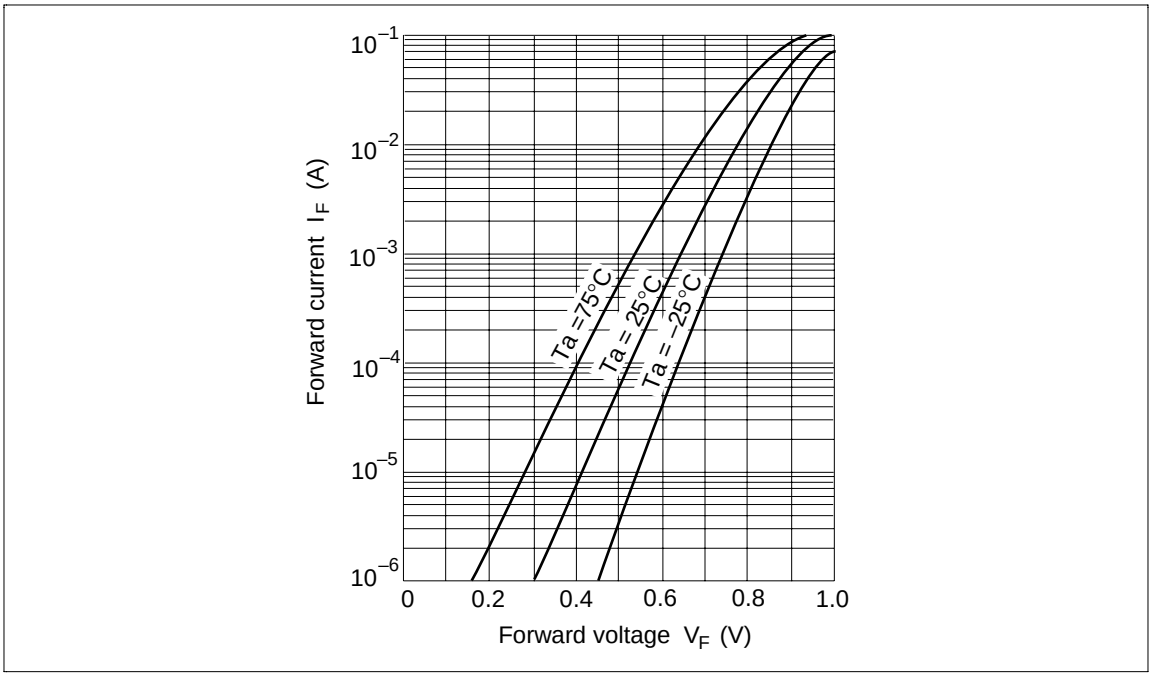


Fig.1 Forward current Vs. Forward voltage

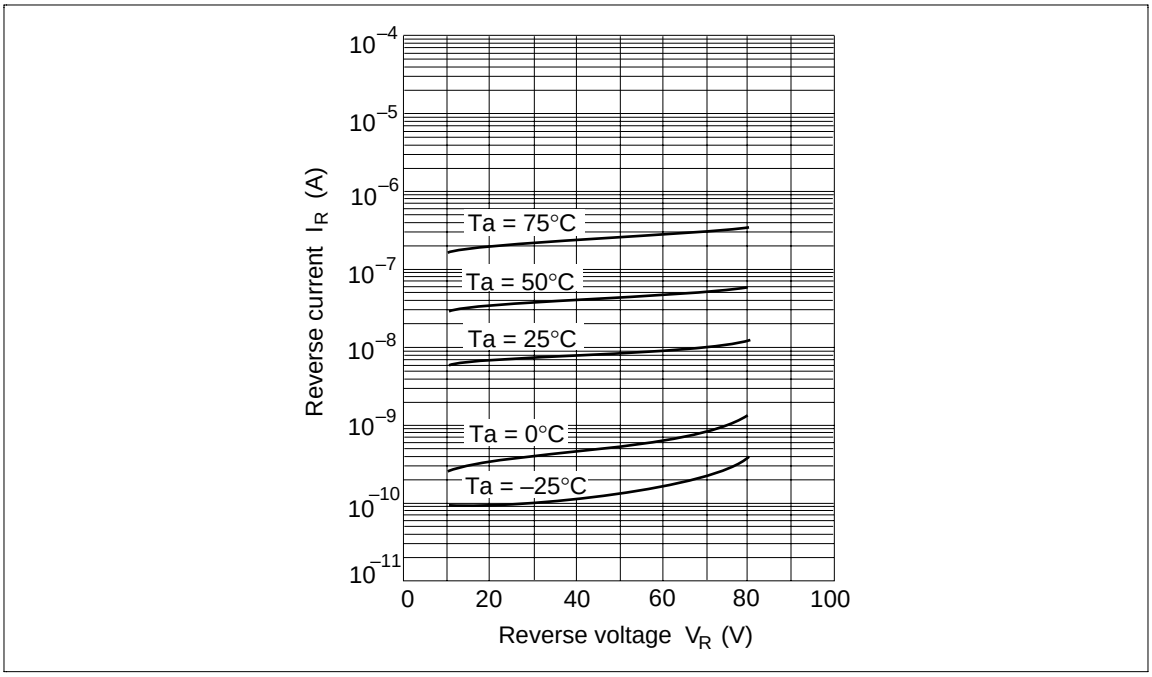


Fig.2 Reverse current Vs. Reverse voltage

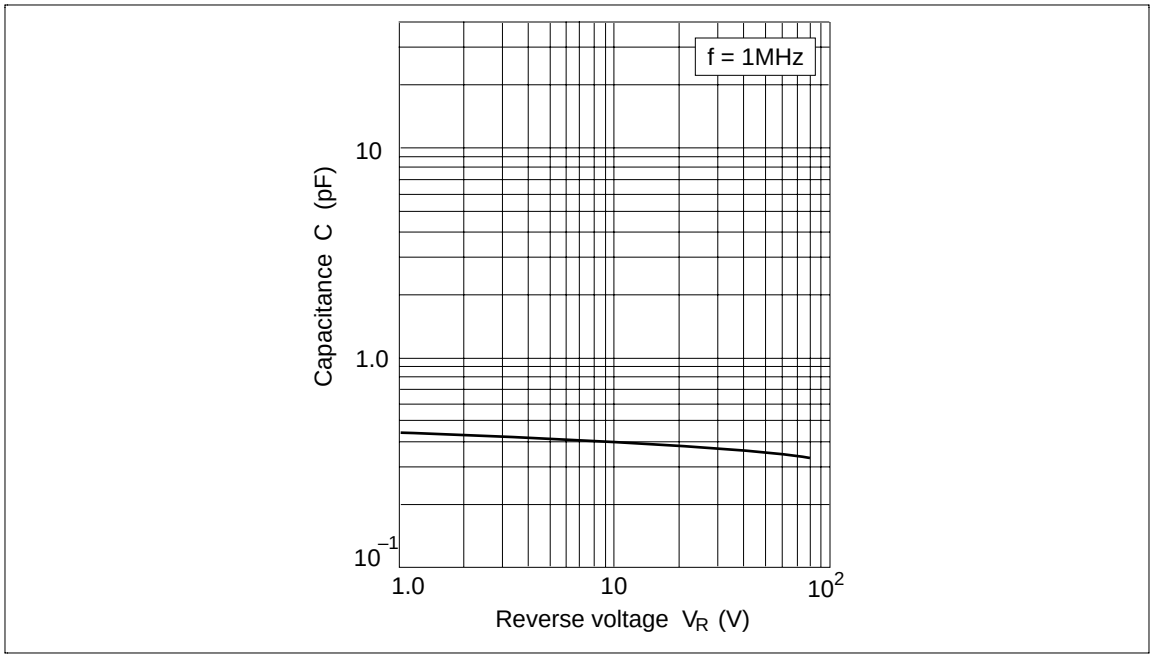
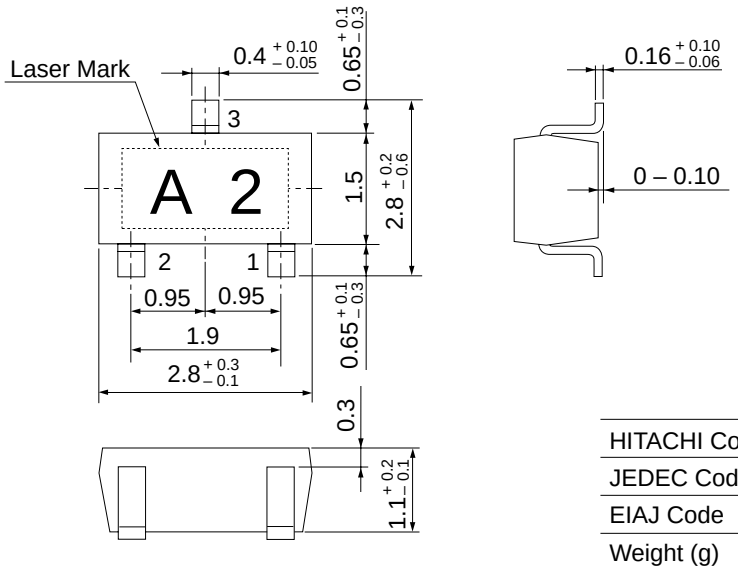


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



1 NC
2 Anode
3 Cathode

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