
HSM221C

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

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

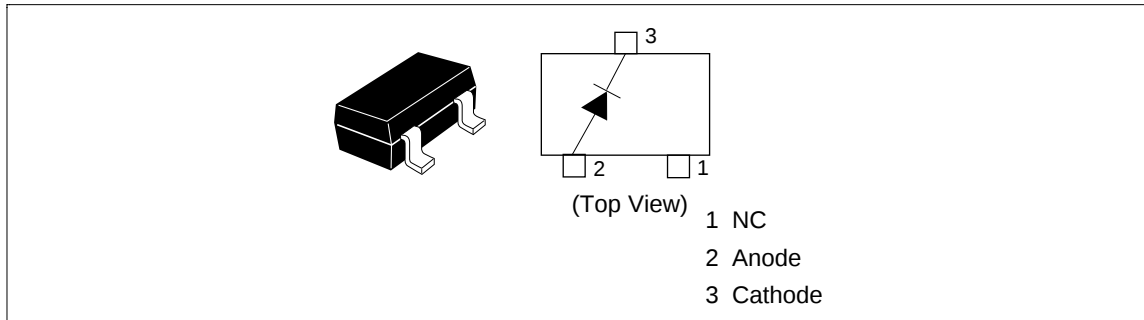
Features

- 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



HSM221C

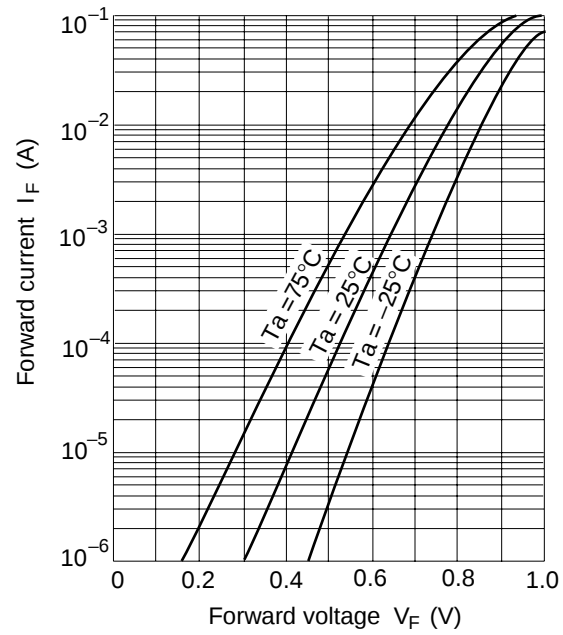
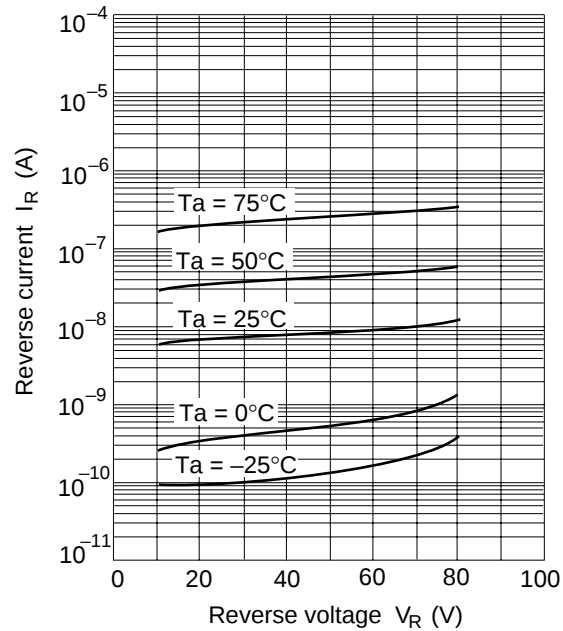
Absolute Maximum Ratings (Ta = 25°C)

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

**Fig.1 Forward current Vs. Forward voltage****Fig.2 Reverse current Vs. Reverse voltage**

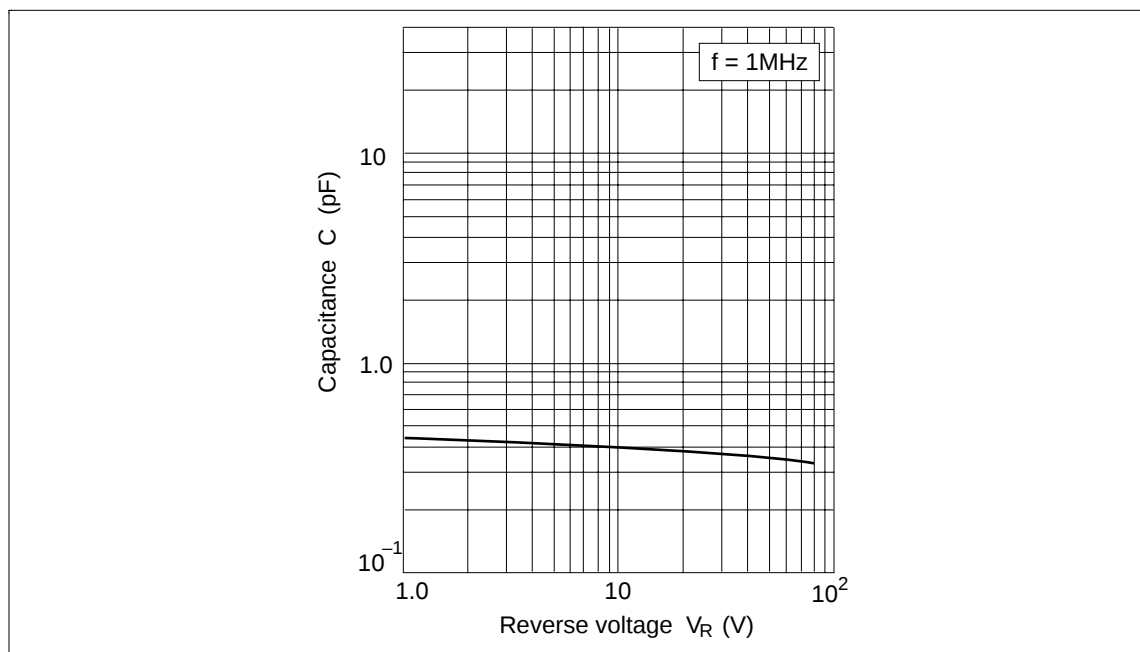


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

