ADE-208-082C(Z)

HVM14
Silicon Epitaxial Planar PIN Diode for High Frequency Attenuator

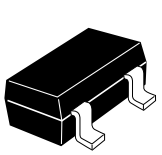
HITACHI

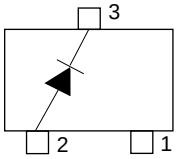
Preliminary
Rev. 3
May. 1993

Features

- Low forward resistance. (r_f =7.0Ω max)
- Low capacitance. (C=0.25pF typ)
- MPAK package is suitable for high density surface mounting and high speed assembly.

Pin Arrangement





(Top View)

1 NC
2 Anode
3 Cathode

Ordering Information

Type No.	Laser Mark	Package Code
HVM14	H 5	MPAK

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	50	V
Forward current	I_F	50	mA
Power dissipation	P_d	100	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	1.0	V	I_F = 50 mA
Reverse current	I_R	—	—	100	nA	V_R = 50 V
Capacitance	C	—	0.25	—	pF	V_R = 50 V , f = 1 MHz
Forward resistance	r_f	—	—	7.0	Ω	I_F = 10 mA, f = 100 MHz
ESD-Capability	—	200	—	—	V	*C=200pF, Both forward and reverse direction 1 pulse.

* Failure criterion ; $I_R \geq$ 200nA at V_R = 50 V

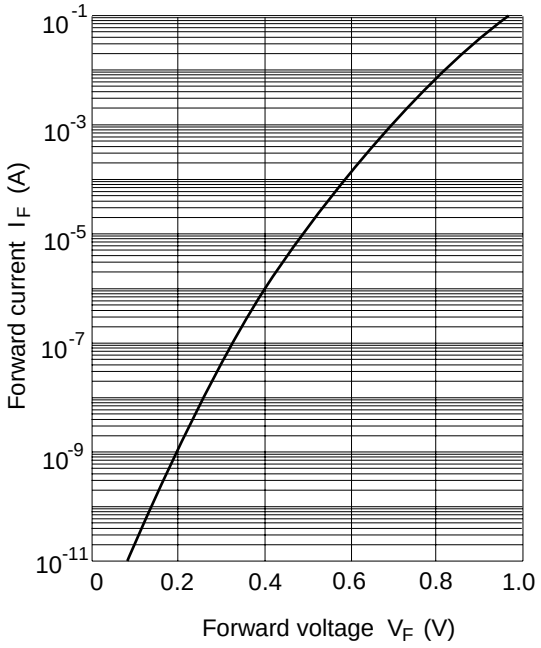


Fig.1 Forward current Vs. Forward voltage

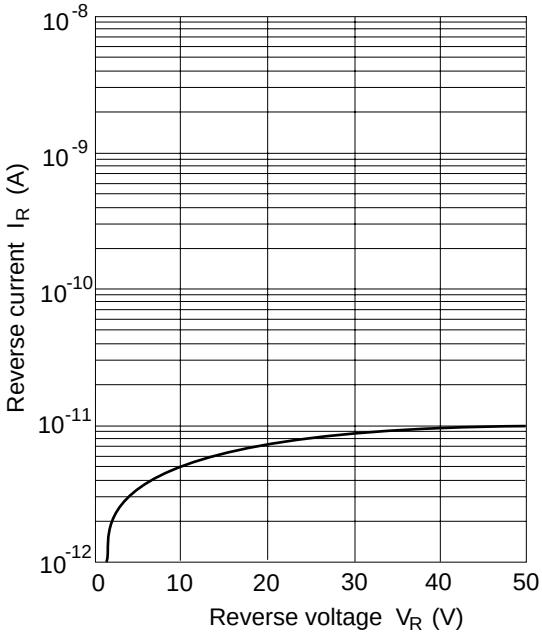


Fig.2 Reverse current Vs. Reverse voltage

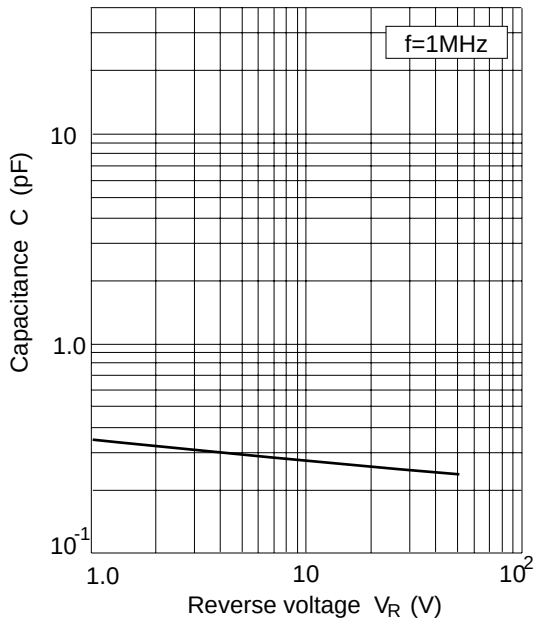


Fig.3 Capacitance Vs. Reverse voltage

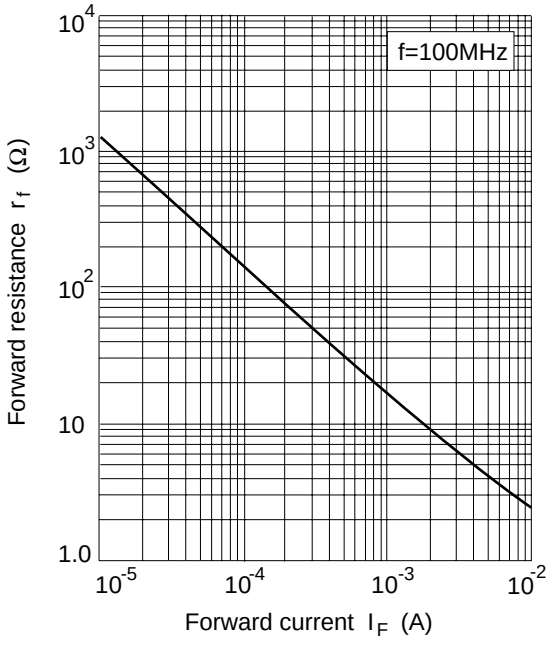
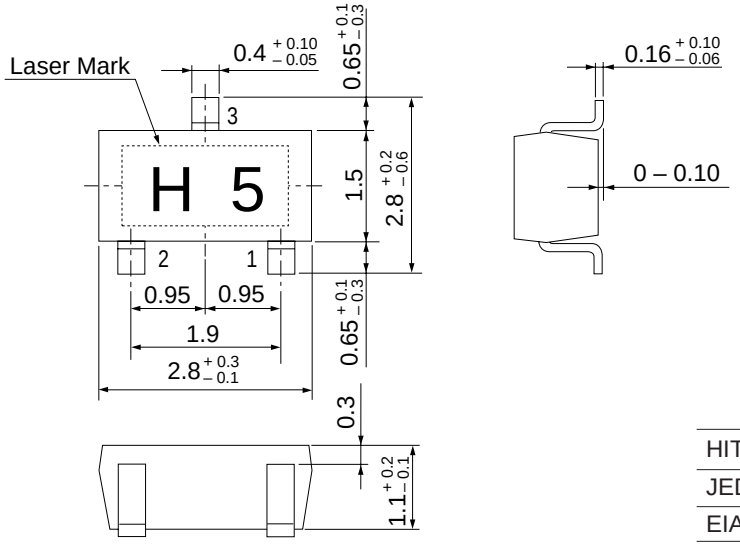


Fig.4 Forward resistance Vs. Forward current

Package Dimensions

Unit: mm



1 NC
2 Anode
3 Cathode

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