

HVM14

Silicon Epitaxial Planar PIN Diode for High Frequency Attenuator

HITACHI

ADE-208-082C (Z)
Rev. 3
May 1993

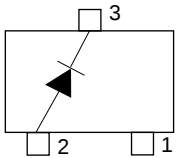
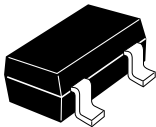
Features

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

Ordering Information

Type No.	Laser Mark	Package Code
HVM14	H5	MPAK

Pin Arrangement



(Top View)

- 1 NC
- 2 Anode
- 3 Cathode

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	$I_F = 50\text{mA}$
Reverse current	I_R	—	—	100	nA	$V_R = 50\text{V}$
Capacitance	C	—	0.25	—	pF	$V_R = 50\text{V}$, $f = 1\text{MHz}$
Forward resistance	r_f	—	—	7.0	Ω	$I_F = 10\text{mA}$, $f = 100\text{MHz}$
ESD-Capability	—	200	—	—	V	*C = 200pF, Both forward and reverse direction 1 pulse.

Note: Failure criterion; $I_R \geq 200\text{nA}$ at $V_R = 50\text{V}$

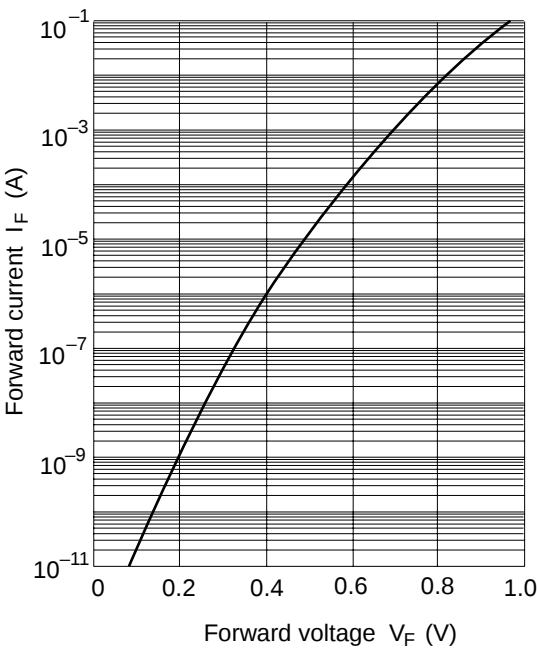


Fig.1 Forward current Vs. Forward voltage

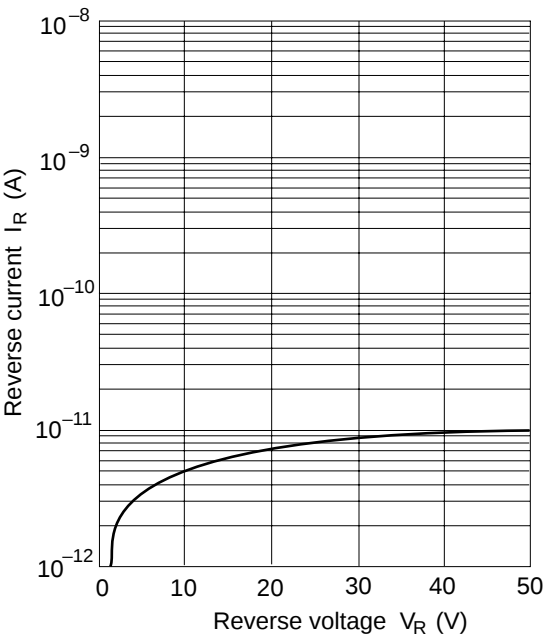


Fig.2 Reverse current Vs. Reverse voltage

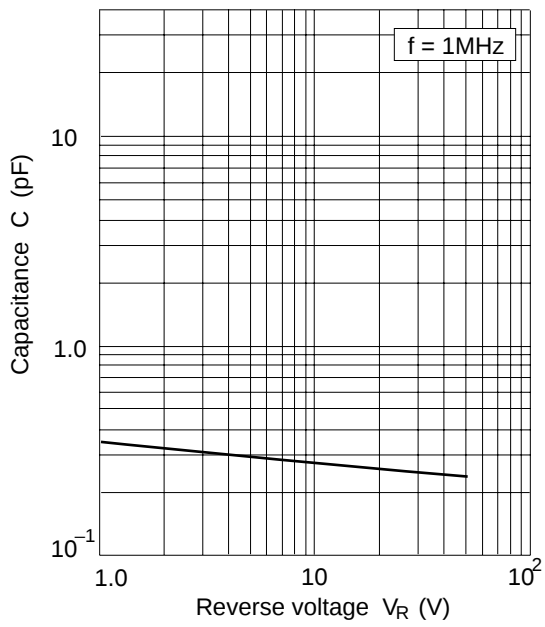


Fig.3 Capacitance Vs. Reverse voltage

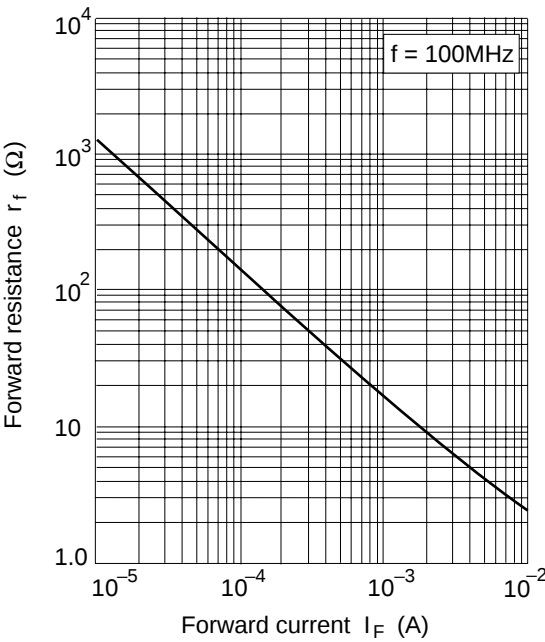


Fig.4 Forward resistance Vs. Forward current

Technical drawing of a mechanical part, likely a bracket or support. The drawing shows a side view of the part with a vertical section. Two dimensions are indicated with arrows pointing to the vertical section:

- The top dimension is $0.16^{+0.10}_{-0.06}$.
- The bottom dimension is $0 - 0.10$.

- 1 NC
- 2 Anode
- 3 Cathode

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

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