

HVM14

Silicon Epitaxial Planar PIN Diode for High Frequency Attenuator

REJ03G0112-0400Z
(Previous: ADE-208-082C)
Rev.4.00
Oct.08.2003

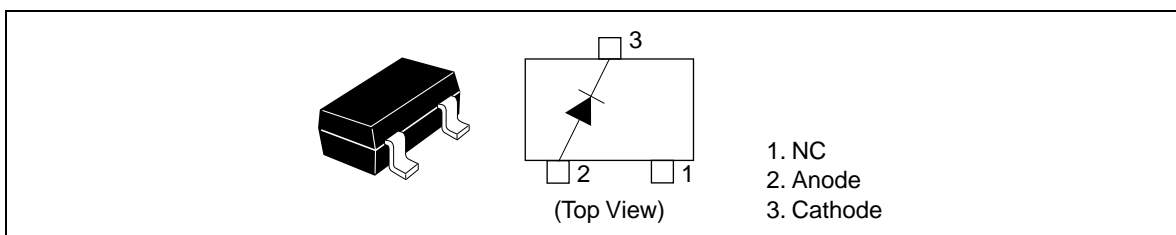
Features

- Low forward resistance. ($r_f = 7.0 \Omega$ max)
- Low capacitance. ($C = 0.25$ 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



HVM14

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	50	V
Forward current	I_F	50	mA
Power dissipation	Pd	100	mW
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-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 *1	—	200	—	—	V	C = 200 pF, Both forward and reverse direction 1 pulse.

Note: 1. Failure criterion; $I_R \geq 200 \text{ nA}$ at $V_R = 50 \text{ V}$

Main Characteristic

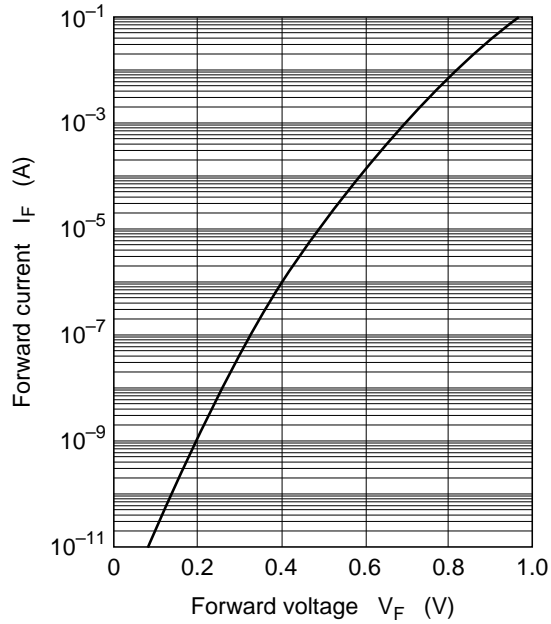


Fig.1 Forward current vs. Forward voltage

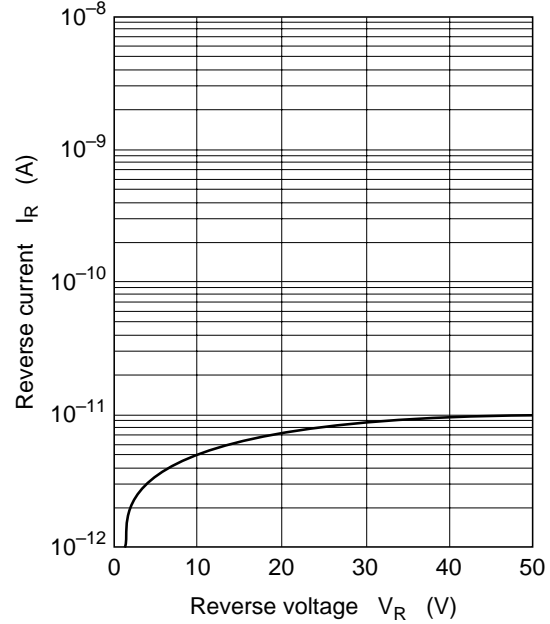


Fig.2 Reverse current vs. Reverse voltage

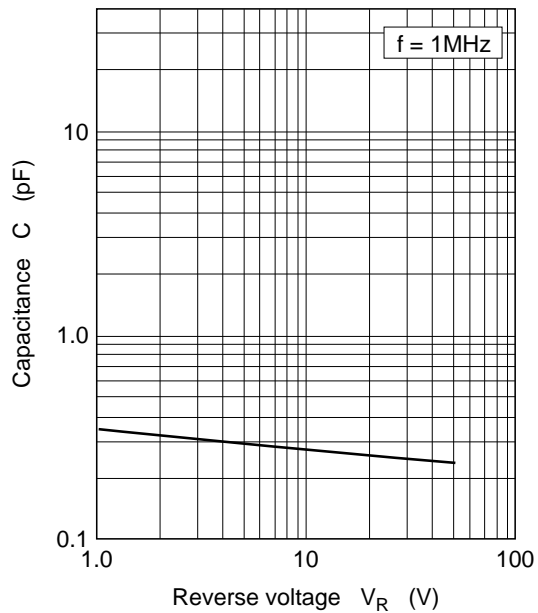


Fig.3 Capacitance vs. Reverse voltage

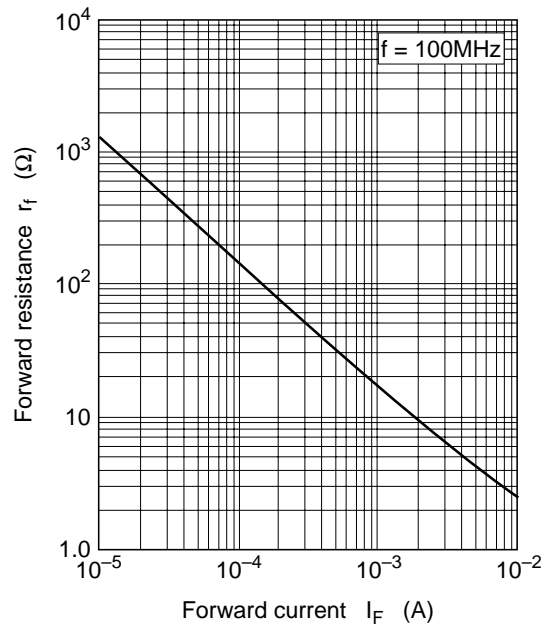
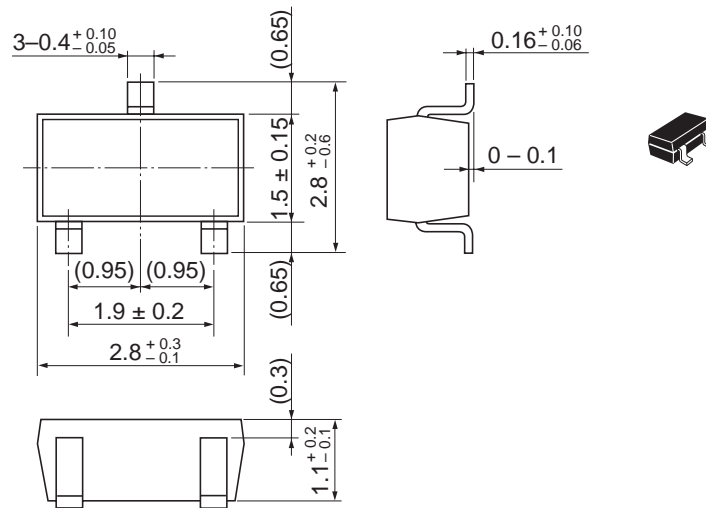


Fig.4 Forward resistance vs. Forward current

Package Dimensions

As of January, 2003

Unit: mm



Package Code	MPAK(D)
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.011 g

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April 1st, 2010
Renesas Electronics Corporation

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