

# HVM14SR

## Silicon Epitaxial Planar PIN Diode for High Frequency Attenuator

REJ03G0114-0400Z  
(Previous: ADE-208-084C)  
Rev.4.00  
Oct.08.2003

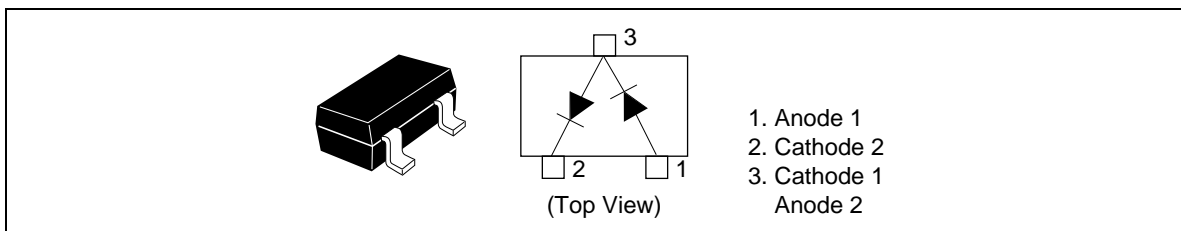
### Features

- 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
HVM14SR	H7	MPAK

### Pin Arrangement



**Absolute Maximum Ratings \*<sup>1</sup>**(T<sub>a</sub> = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V <sub>R</sub>	50	V
Forward current	I <sub>F</sub>	50	mA
Power dissipation	P <sub>d</sub>	100	mW
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	T <sub>stg</sub>	–55 to +125	°C

Note: 1. Absolute maximum ratings are described each unit separately.

**Electrical Characteristics \*<sup>1</sup>**(T<sub>a</sub> = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V <sub>F</sub>	—	—	1.0	V	I <sub>F</sub> = 50 mA
Reverse current	I <sub>R</sub>	—	—	100	nA	V <sub>R</sub> = 50 V
Capacitance	C	—	0.25	—	pF	V <sub>R</sub> = 50 V, f = 1 MHz
Forward resistance	r <sub>f</sub>	—	—	7.0	Ω	I <sub>F</sub> = 10 mA, f = 100 MHz
ESD-Capability * <sup>2</sup>	—	200	—	—	V	C = 200 pF, Both forward and reverse direction 1 pulse.

Notes: 1. Per one device.

2. Failure criterion; I<sub>R</sub> ≥ 200 nA at V<sub>R</sub> = 50 V

## Main Characteristic

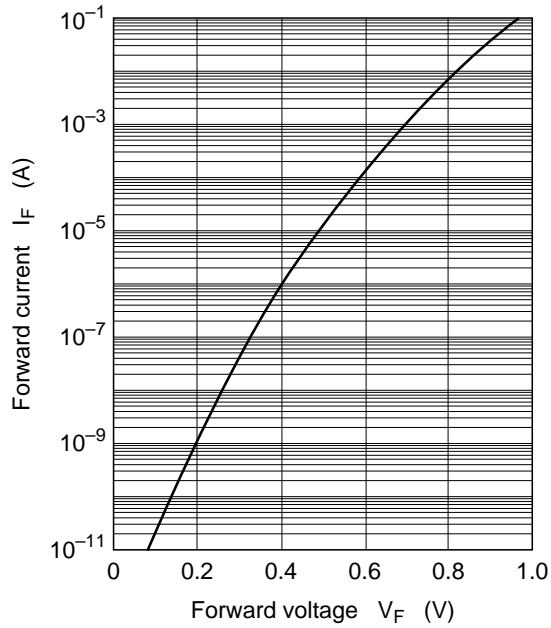


Fig.1 Forward current vs. Forward voltage

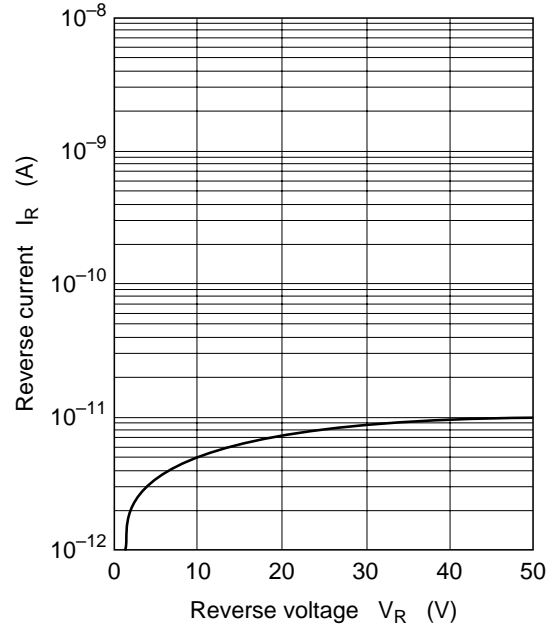


Fig.2 Reverse current vs. Reverse voltage

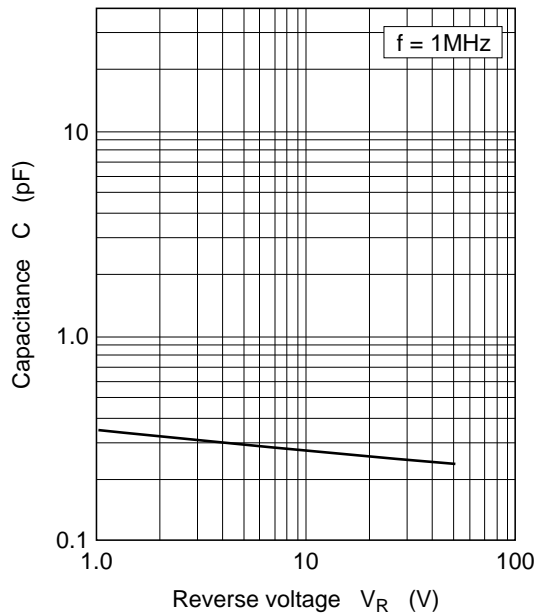


Fig.3 Capacitance vs. Reverse voltage

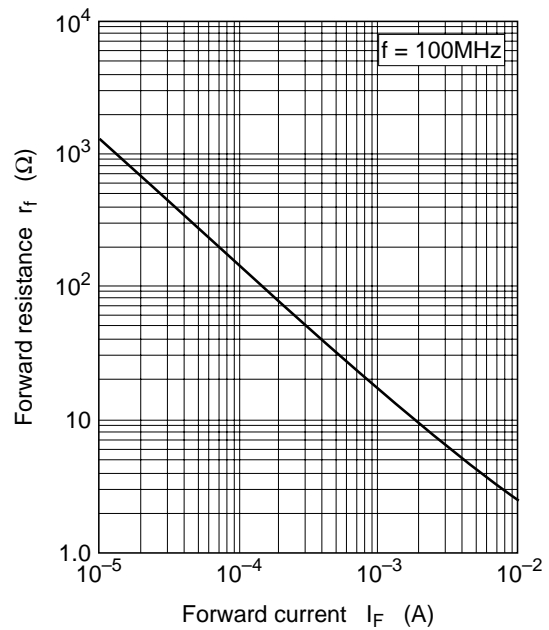
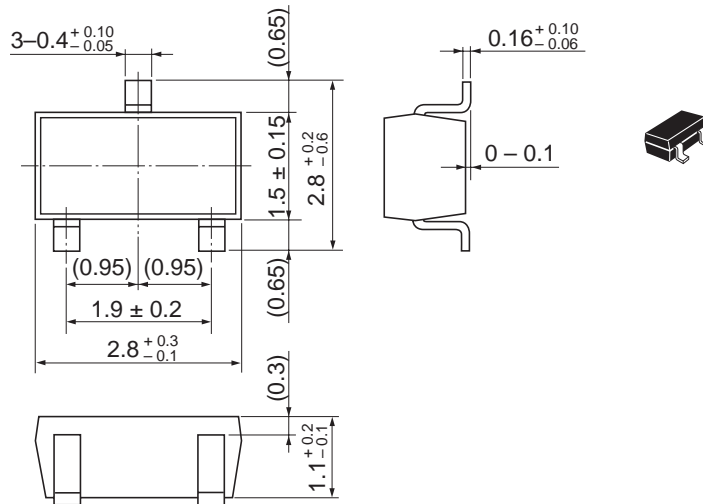


Fig.4 Forward resistance vs. Forward current

## 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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