

# **HVM189S**

# Silicon Epitaxial Planar Pin Diode for High Frequency Attenuator

REJ03G0442-0100

(Previous: ADE-208-1502)

Rev.1.00 Dec 20, 2004

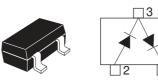
#### **Features**

- Low forward resistance. (rf =  $5.5 \Omega$  max)
- MPAK package is suitable for high density surface mounting and high speed assembly.

### **Ordering Information**

| Type No. | Laser Mark | Package Code |
|----------|------------|--------------|
| HVM189S  | Н9         | MPAK         |

#### **Pin Arrangement**



(Top View)

- 1. Cathode2
- 2. Anode1
- 3. Cathode1 Anode2

## **Absolute Maximum Ratings**

 $(Ta = 25^{\circ}C)$ 

| Item                 | Symbol         | Value       | Unit |
|----------------------|----------------|-------------|------|
| Reverse voltage      | V <sub>R</sub> | 60          | V    |
| Forward current      | l <sub>F</sub> | 50          | mA   |
| Power dissipation    | Pd *1          | 100         | mW   |
| Junction temperature | Tj             | 125         | °C   |
| Storage temperature  | Tstg           | -55 to +125 | °C   |

Note: 1. Per one device.

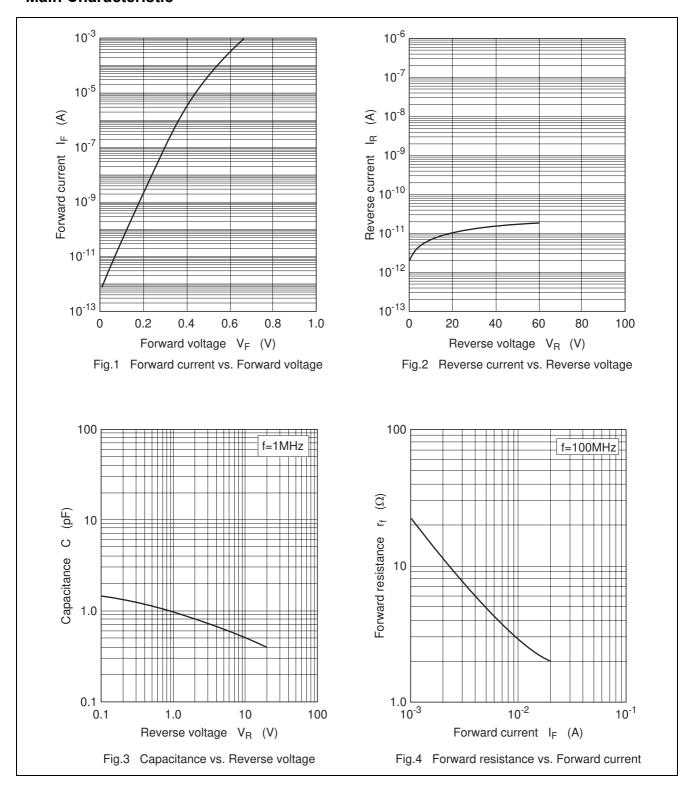
#### **Electrical Characteristics**

 $(Ta = 25^{\circ}C)$ 

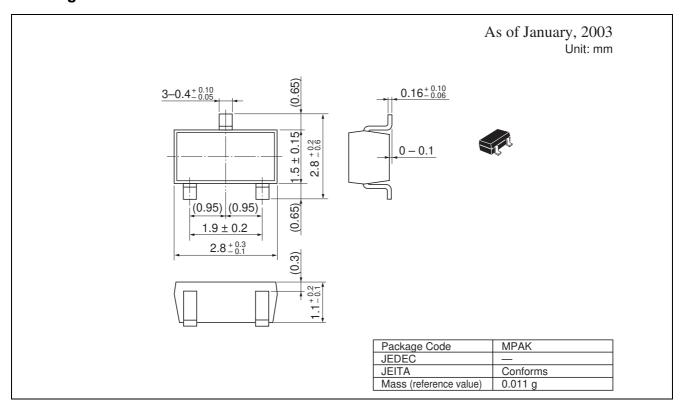
| Item               | Symbol         | Min  | Тур | Max | Unit | Test Condition                            |
|--------------------|----------------|------|-----|-----|------|---|
| Reverse current    | I <sub>R</sub> | _    | _   | 100 | nA   | V <sub>R</sub> = 60 V                     |
| Forward voltage    | $V_{F}$        | _    | _   | 1.0 | V    | I <sub>F</sub> = 10 mA                    |
| Capacitance        | С              | _    | _   | 2.4 | pF   | V <sub>R</sub> = 0 V, f = 1 MHz           |
| Forward resistance | r <sub>f</sub> | 3. 5 | _   | 5.5 | Ω    | I <sub>F</sub> = 10 mA, f = 100 MHz       |
| ESD-Capability *1  | _              | 200  | _   | _   | V    | C = 200 pF, R = 0 $\Omega$ , Both forward |
|                    |                |      |     |     |      | and reverse direction 1 pulse.            |

Note: 1. Failure criterion;  $I_R > 100$  nA at  $V_R = 60$  V

#### **Main Characteristic**



## **Package Dimensions**



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