# **HSM88WA**

## Silicon Schottky Barrier Diode for Balanced Mixer

# **HITACHI**

ADE-208-048D (Z)

Rev. 4 Jul. 1998

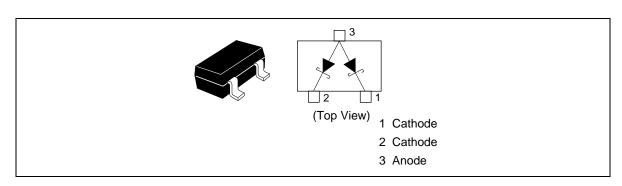
#### **Features**

- Proof against high voltage.
- MPAK package is suitable for high density surface mounting and high speed assembly.

### **Ordering Information**

| Type No. | Laser Mark | Package Code |
|----------|------------|--------------|
| HSM88WA  | C7         | MPAK         |

#### **Outline**





### **HSM88WA**

## **Absolute Maximum Ratings**

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

| Item                      | Symbol         | Value       | Unit |
|---------------------------|----------------|-------------|------|
| Reverse voltage           | $V_{R}$        | 10          | V    |
| Average rectified current | I <sub>o</sub> | 15          | mA   |
| Junction temperature      | Tj             | 125         | °C   |
| Storage temperature       | Tstg           | -55 to +125 | °C   |

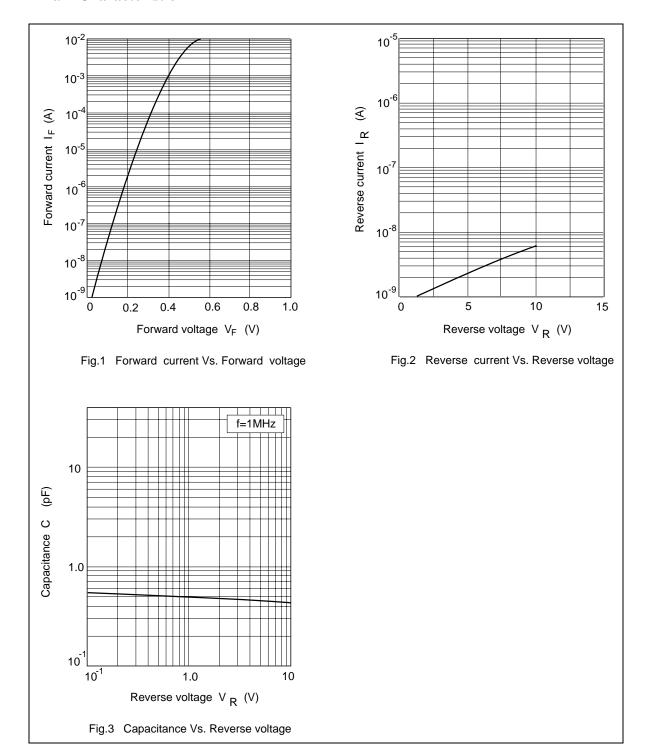
### **Electrical Characteristics**

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

| Item                         | Symbol                | Min | Тур | Max  | Unit | Test Condition  |
|------------------------------|-----------------------|-----|-----|------|------|---|
| Forward voltage              | $V_{F1}$              | 350 | _   | 420  | mV   | I <sub>F</sub> = 1 mA                                 |
|                              | V <sub>F2</sub>       | 500 | _   | 580  | _    | I <sub>F</sub> = 10 mA                                |
| Reverse current              | I <sub>R1</sub>       | _   | _   | 0.2  | μΑ   | V <sub>R</sub> = 2V                                   |
|                              | I <sub>R2</sub>       | _   | _   | 10   | _    | V <sub>R</sub> = 10V                                  |
| Capacitance                  | С                     | _   | _   | 0.85 | pF   | $V_R = 0V$ , $f = 1 MHz$                              |
| Capacitance deviation        | ΔC                    | _   | _   | 0.10 | pF   | $V_R = 0V$ , $f = 1 MHz$                              |
| Forward voltage deviation    | $\Delta V_{_{\rm F}}$ | _   | _   | 10   | mV   | I <sub>F</sub> = 10 mA                                |
| ESD-Capability <sup>*1</sup> | _                     | 30  | _   | _    | V    | C=200pF , Both forward and reverse direction 1 pulse. |

Notes 1. Failure criterion ; IR ≥ 400nA at VR =2 V

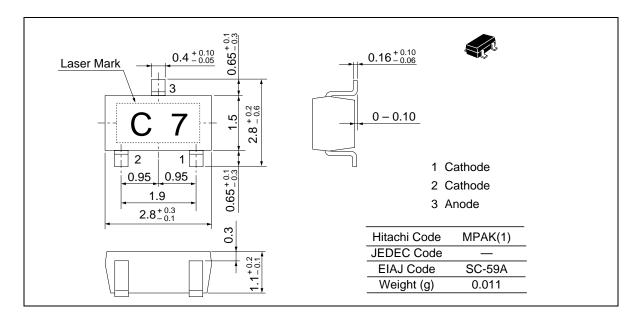
#### **Main Characteristic**



## HSM88WA

## **Package Dimensions**

Unit: mm



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