

## HSM88AS

### Silicon Schottky Barrier Diode for Balanced Mixer

REJ03G0135-0600Z  
(Previous: ADE-208-046E)  
Rev.6.00  
Nov.06.2003

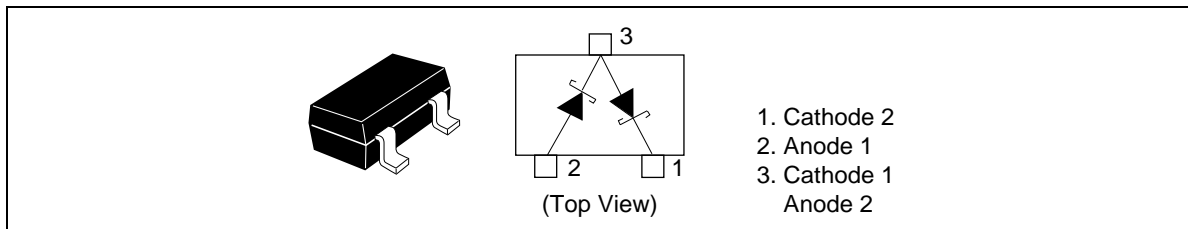
#### Features

- 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
HSM88AS	C1	MPAK

#### Pin Arrangement



**Absolute Maximum Ratings**

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V <sub>R</sub>	10	V
Average rectified current	I <sub>O</sub> * <sup>1</sup>	15	mA
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-55 to +125	°C

Note: 1. Per one device

**Electrical Characteristics \*<sup>1</sup>**

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V <sub>F1</sub>	0.35	—	0.42	V	I <sub>F</sub> = 1 mA
	V <sub>F2</sub>	0.50	—	0.58		I <sub>F</sub> = 10 mA
Reverse current	I <sub>R1</sub>	—	—	0.2	μA	V <sub>R</sub> = 2 V
	I <sub>R2</sub>	—	—	10		V <sub>R</sub> = 10 V
Capacitance	C	—	—	0.85	pF	V <sub>R</sub> = 0 V, f = 1 MHz
Capacitance deviation	ΔC	—	—	0.10	pF	V <sub>R</sub> = 0 V, f = 1 MHz
Forward voltage deviation	ΔV <sub>F</sub>	—	—	10	mV	I <sub>F</sub> = 10 mA
ESD-Capability * <sup>2</sup>	—	30	—	—	V	C = 200 pF, R = 0 Ω, Both forward and reverse direction 1 pulse.

Notes: 1. Per one device

2. Failure criterion ; I<sub>R</sub> ≥ 0.4 μA at V<sub>R</sub> = 2 V

### Main Characteristics

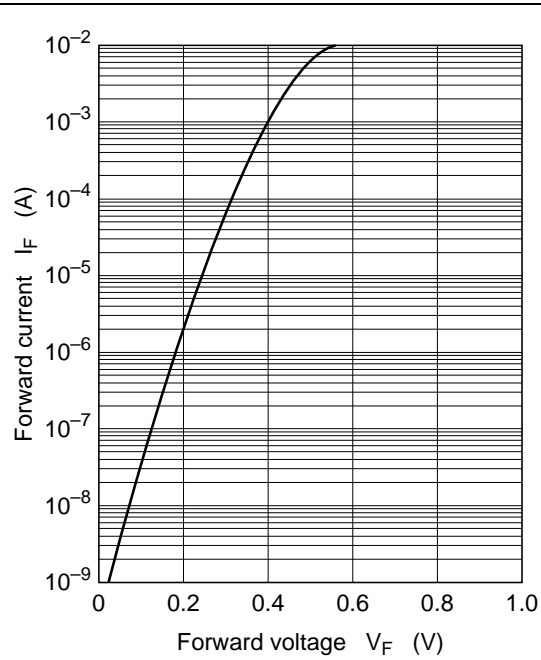


Fig.1 Forward current vs. Forward voltage

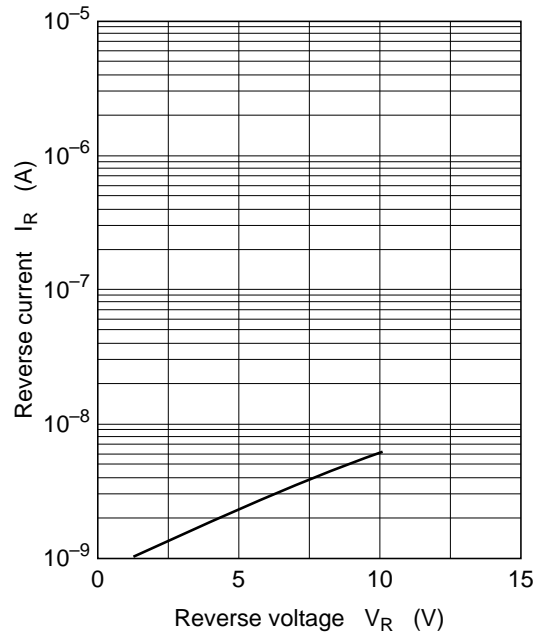


Fig.2 Reverse current vs. Reverse voltage

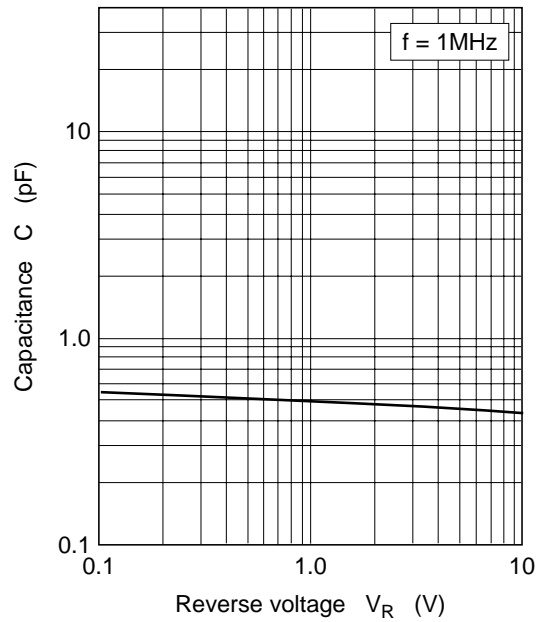
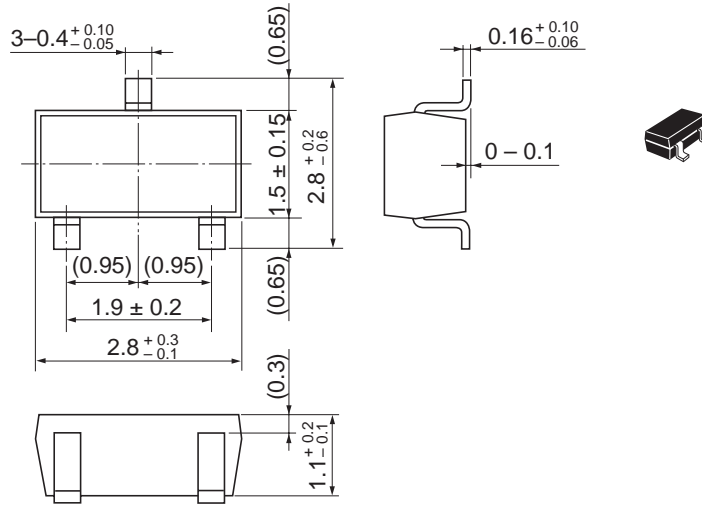


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions

As of January, 2003  
Unit: mm



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

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