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# HSM88AS

Silicon Schottky Barrier Diode for Balanced Mixer

# HITACHI

ADE-208-046E (Z)

Rev. 5  
Jul. 1998

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## Features

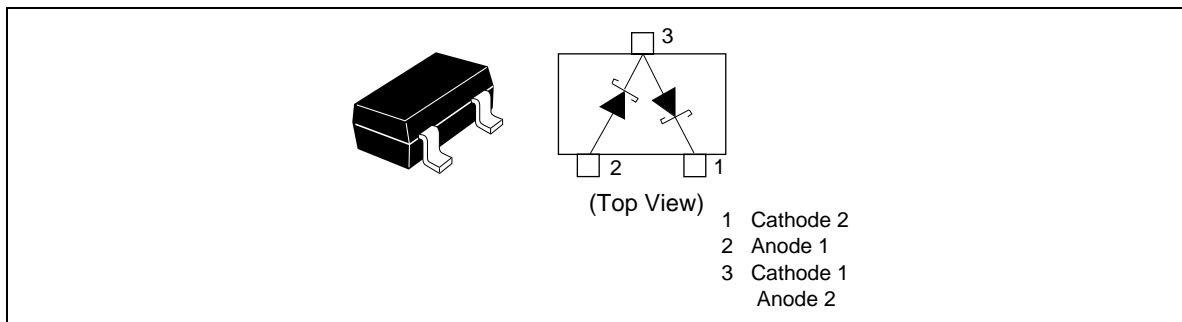
- Proof against high voltage.
- MPAK package is suitable for high density surface mounting and high speed assembly.

## Ordering Information

Type No.	Laser Mark	Package Code
HSM88AS	C1	MPAK

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## Outline



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# HSM88AS

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## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	10	V
Average rectified current	$I_O^{*1}$	15	mA
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	$V_{F1}$	350	—	420	mV	$I_F = 1 \text{ mA}$
	$V_{F2}$	500	—	580		$I_F = 10 \text{ mA}$
Reverse current	$I_{R1}$	—	—	0.2	$\mu\text{A}$	$V_R = 2\text{V}$
	$I_{R2}$	—	—	10		$V_R = 10\text{V}$
Capacitance	C	—	—	0.85	pF	$V_R = 0\text{V}, f = 1 \text{ MHz}$
Capacitance deviation	$\Delta C$	—	—	0.10	pF	$V_R = 0\text{V}, f = 1 \text{ MHz}$
Forward voltage deviation	$\Delta V_F$	—	—	10	mV	$I_F = 10 \text{ mA}$
ESD-Capability <sup>*1</sup>	—	30	—	—	V	C=200pF, Both forward and reverse direction 1 pulse.

Notes 1. Failure criterion ;  $IR \geq 400\text{nA}$  at  $VR = 2 \text{ V}$

Main Characteristic

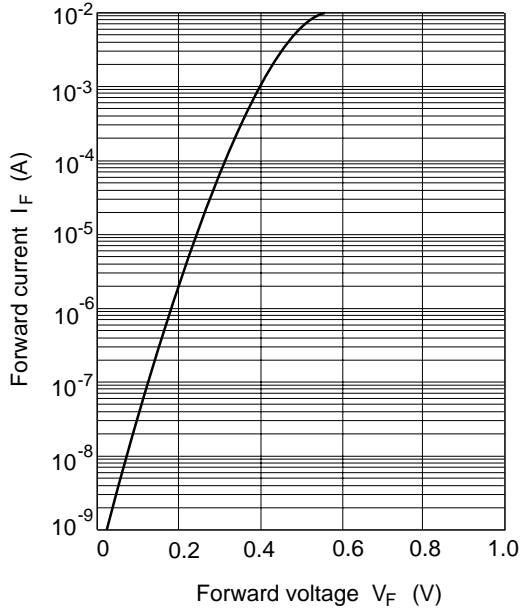


Fig.1 Forward current Vs. Forward voltage

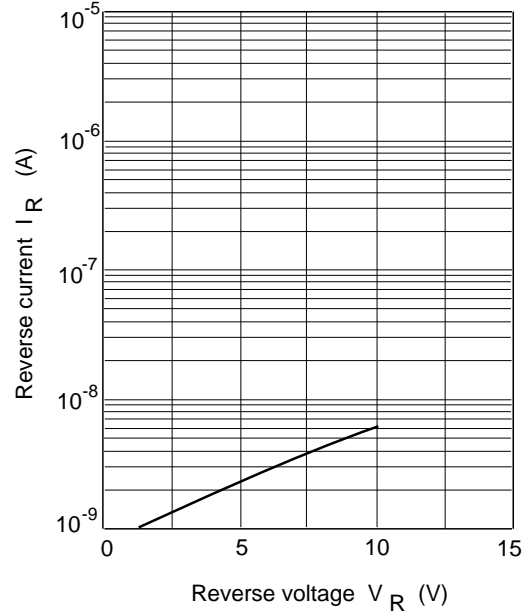


Fig.2 Reverse current Vs. Reverse voltage

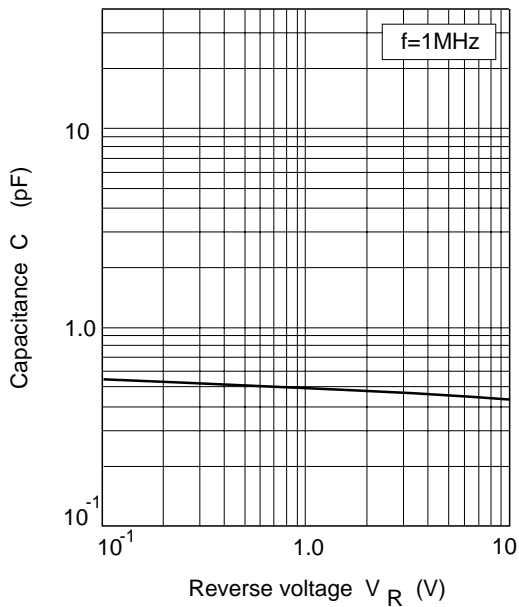
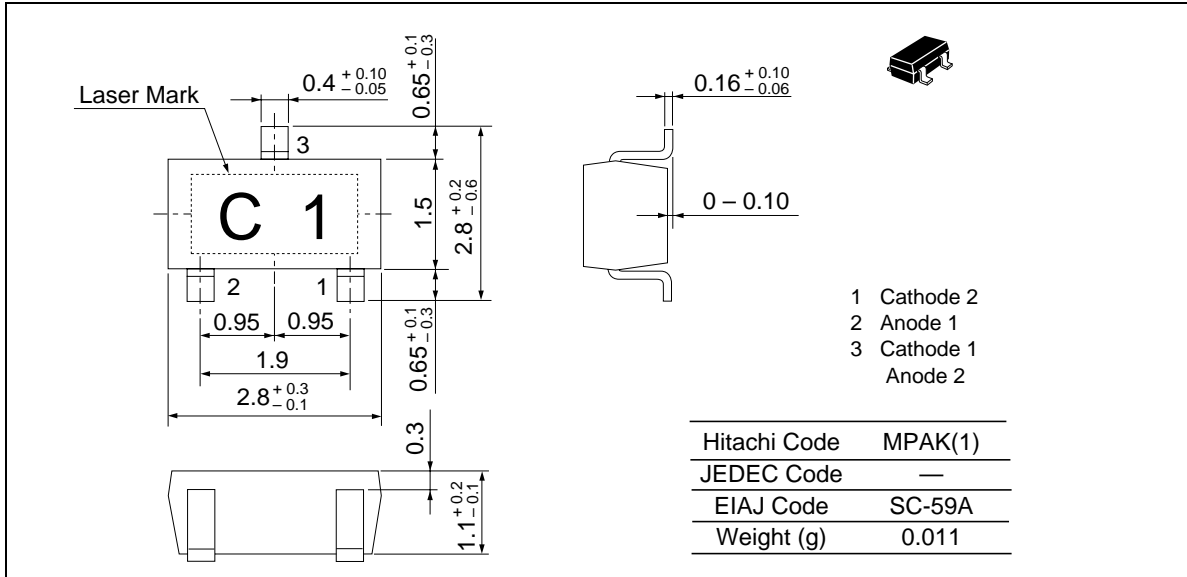


Fig.3 Capacitance Vs. Reverse voltage

# HSM88AS

## Package Dimensions

Unit : mm



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