

# HSM276AS

Silicon Schottky Barrier Diode for Balanced Mixer

# HITACHI

ADE-208-839 (Z)  
Rev 0  
Feb. 2000

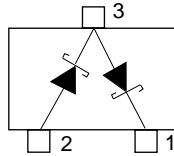
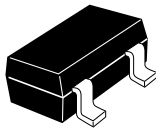
## Features

- High forward current, Low capacitance.
- HSM276AS which is interconnected in series configuration is designed for balanced mixer use.
- MPAK package is suitable for high density surface mounting and high speed assembly.

## Ordering Information

Type No.	Laser Mark	Package Code
HSM276AS	S19	MPAK

## Outline



(Top View)

- 1 Cathode 2
- 2 Anode 1
- 3 Cathode 1  
Anode 2

## Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	$V_{RRM}$	5	V
Reverse voltage	$V_R$	3	V
Average rectified current	$I_O^*$	30	mA
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

Note: Per one device

## Electrical Characteristics (Ta = 25°C) \*2

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	$V_R$	3.0	—	—	V	$I_R = 1 \text{ mA}$
Reverse current	$I_R$	—	—	50	$\mu\text{A}$	$V_R = 0.5\text{V}$
Forward current	$I_F$	35	—	—	mA	$V_F = 0.5\text{V}$
Capacitance	C	—	—	0.90	pF	$V_R = 0.5\text{V}, f = 1 \text{ MHz}$
Capacitance deviation	$\Delta C$	—	—	0.10	pF	$V_R = 0.5\text{V}, f = 1 \text{ MHz}$
ESD-Capability*1	—	30	—	—	V	$C=200\text{pF}, R = 0 \Omega$ Both forward and reverse direction 1pulse.

Notes: 1. Failure criterion ;  $I_R \geq 100\mu\text{A}$  at  $V_R = 0.5 \text{ V}$

2. Per one device

Main Characteristic

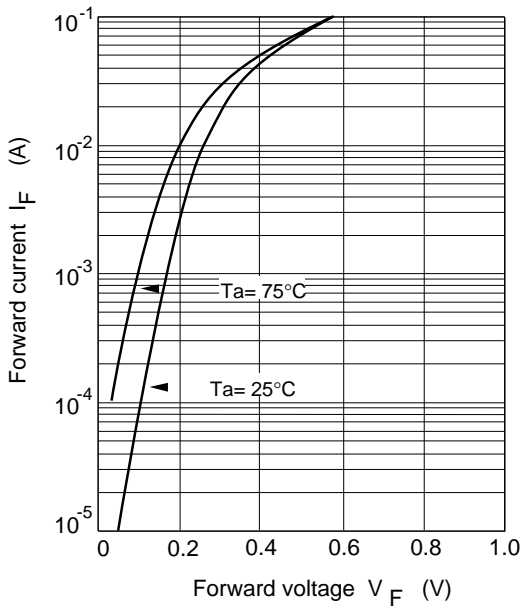


Fig.1 Forward current Vs. Forward voltage

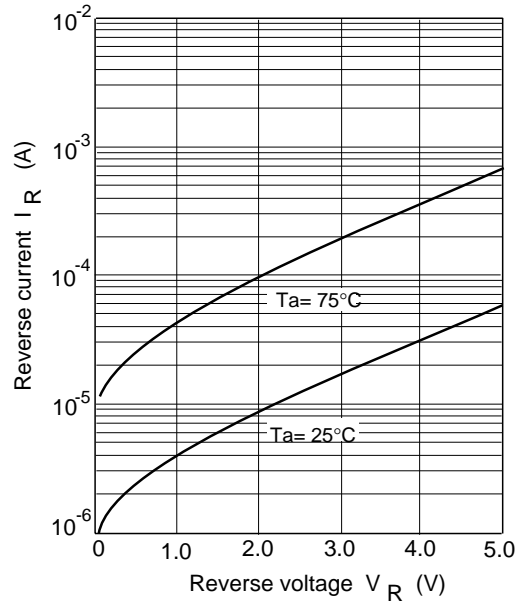


Fig.2 Reverse current Vs. Reverse voltage

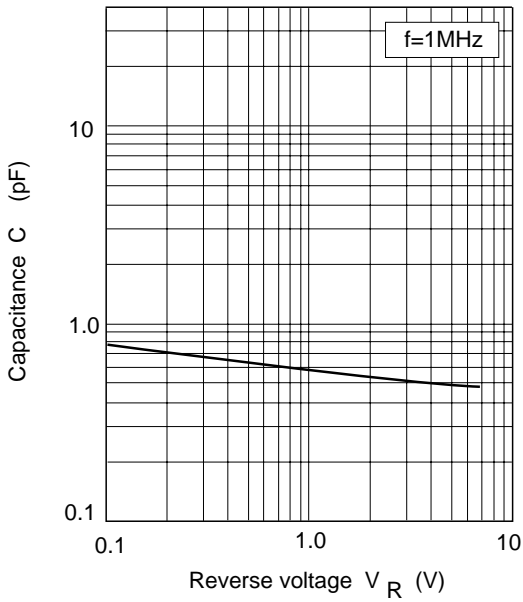
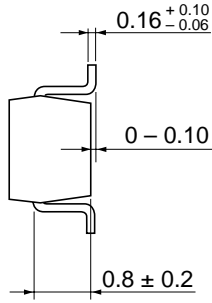
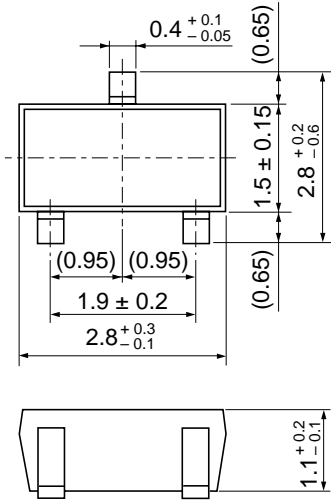


Fig.3 Capacitance Vs. Reverse voltage

## Package Dimensions

Unit: mm



Hitachi Code	MPAK
JEDEC	—
EIAJ	Conforms
Mass	0.011 g

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