

# HSM276SR

Silicon Schottky Barrier Diode for Balanced Mixer

# HITACHI

ADE-208-040D (Z)

Rev. 4

Aug. 1994

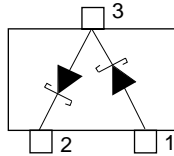
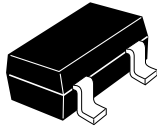
## Features

- High forward current, Low capacitance.
- HSM276SR 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
HSM276SR	C9	MPAK

## Pin Arrangement



(Top View)

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

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

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	3	V
Average forward 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)\*1

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	—	30	—	—	V	*2C = 200pF, Both forward and reverse direction 1 pulse

Notes: 1. Per one device

2. Failure Criterion;  $I_R \geq 100\mu\text{A}$  at  $V_R = 0.5\text{V}$

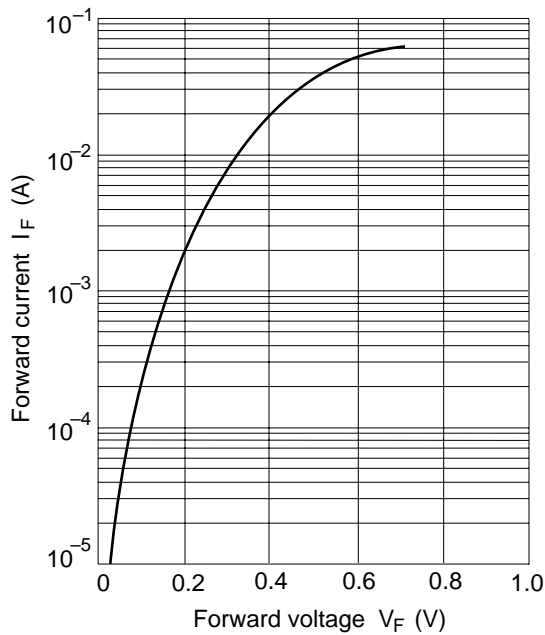
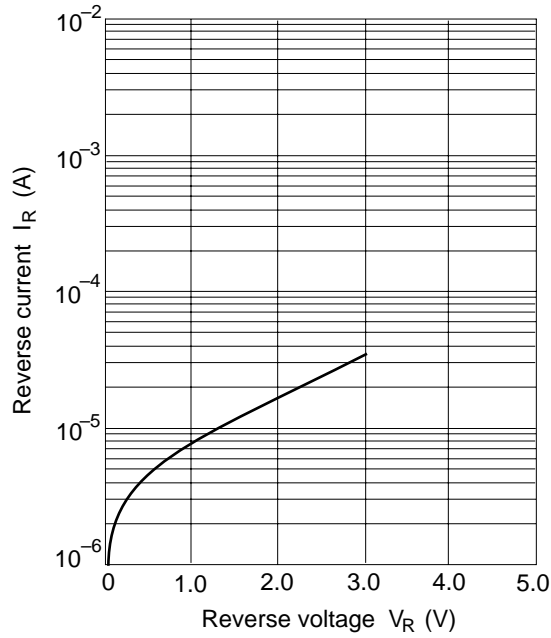
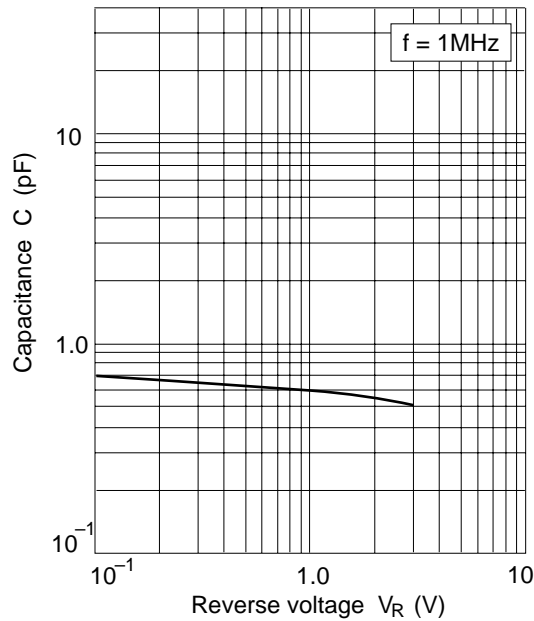


Fig.1 Forward current Vs. Forward voltage



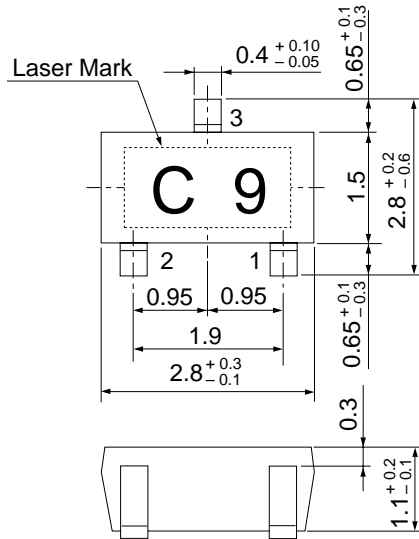
**Fig.2 Reverse current Vs. Reverse voltage**



**Fig.3 Capacitance Vs. Reverse voltage**

## Package Dimensions

Unit: mm



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

HITACHI Code	MPAK(1)
JEDEC Code	—
EIAJ Code	SC-59A
Weight (g)	0.011

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