

# HSM276SR

## Silicon Schottky Barrier Diode for Balanced Mixer

# HITACHI

Rev.4  
Aug. 1994

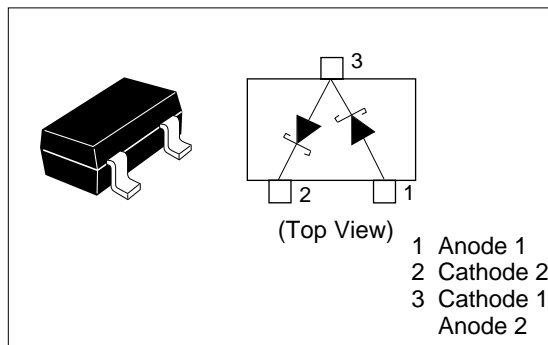
### Features

- 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	C 9	MPAK

### Pin Arrangement



### 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

\* Per one device

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

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	** C=200pF, Both forward and reverse direction 1 pulse

\* Per one device

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

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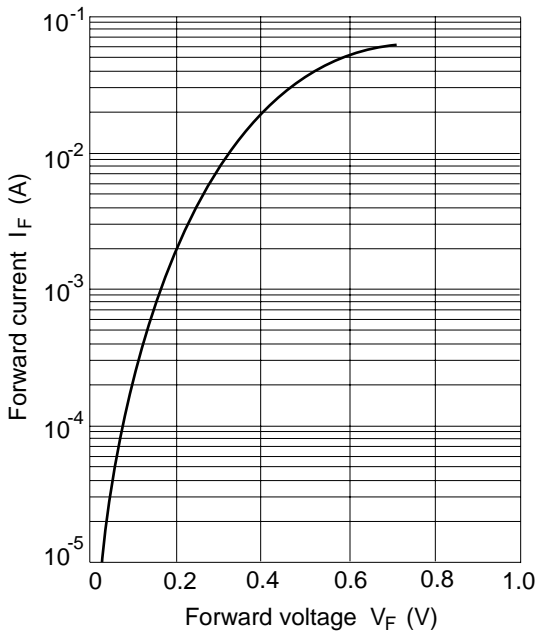


Fig.1 Forward current Vs. Forward voltage

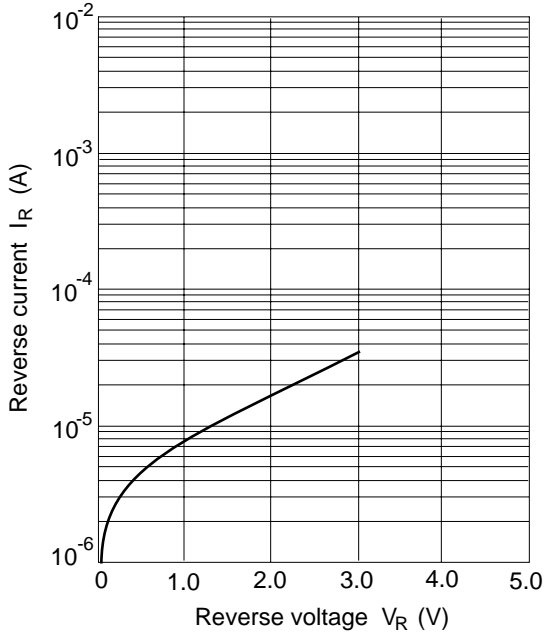


Fig.2 Reverse current Vs. Reverse voltage

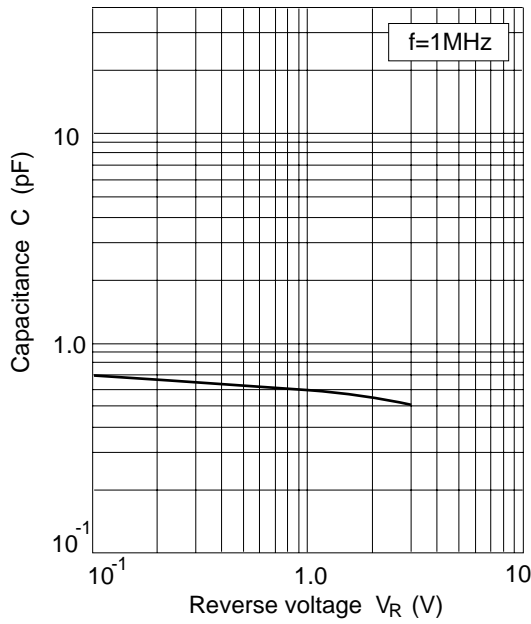


Fig.3 Capacitance Vs. Reverse voltage

### Package Dimensions

Unit: mm

