

# HSM276S

## Silicon Schottky Barrier Diode for Balanced Mixer

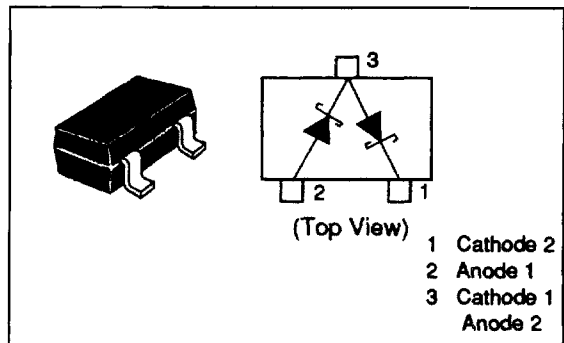
### Features

- High forward current, Low capacitance.
- HSM276S 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
HSM276S	C 2	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	$T_j$	100	°C
Storage temperature	$T_{stg}$	-55 to +100	°C

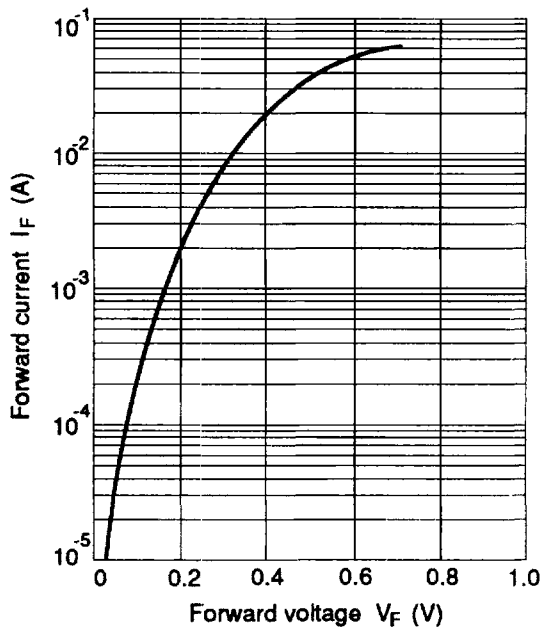
\* Per one device

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

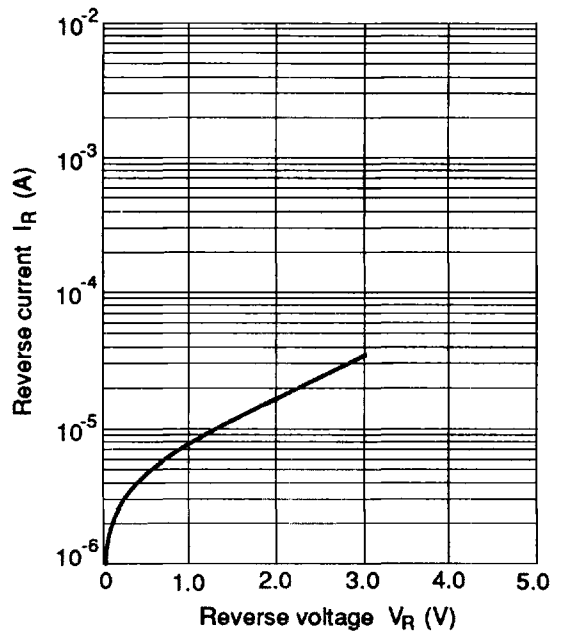
Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	$V_R$	3.0	—	—	V	$I_R = 1 \text{ mA}$
Reverse current	$I_R$	—	—	50	$\mu\text{A}$	$V_R = 0.5 \text{ V}$
Forward current	$I_F$	35	—	—	mA	$V_F = 0.5 \text{ V}$
Capacitance	C	—	—	0.90	pF	$V_R = 0.5 \text{ V}, f = 1 \text{ MHz}$
Capacitance deviation	$\Delta C$	—	—	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

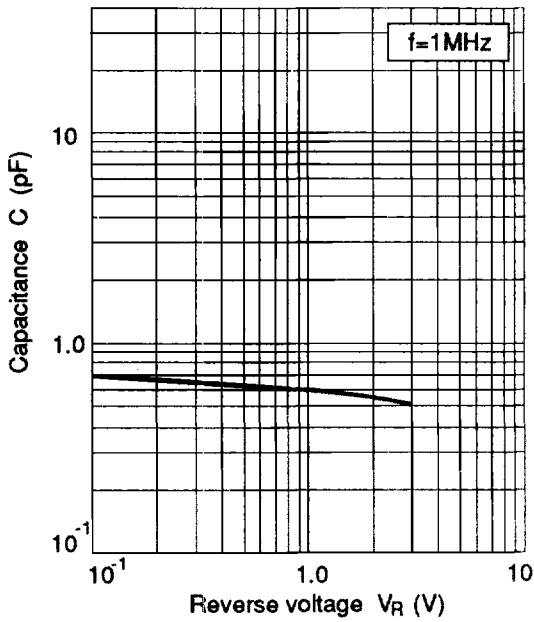
\*\* Failure Criterrion ;  $I_R \geq 100\mu\text{A}$  at  $V_R = 0.5\text{V}$



**Fig.1 Forward current Vs. Forward voltage**



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



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