

HSM276S

Silicon Schottky Barrier Diode for Balanced Mixer

HITACHI

Rev.4
Aug. 1994

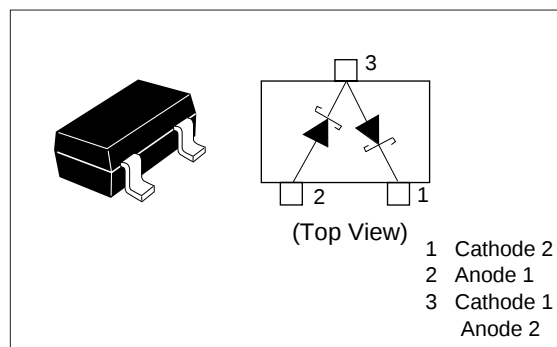
Features

- 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 ($T_a = 25^\circ\text{C}$)

Item	Symbol	Value	Unit
Reverse voltage	V_R	3	V
Average forward current	I_{o^*}	30	mA
Junction temperature	T_j	100	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +100	$^\circ\text{C}$

* Per one device

Electrical Characteristics ($T_a = 25^\circ\text{C}$) *

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	μA	$V_R = 0.5 \text{ V}$
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	ΔC	—	—	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 $V_R = 0.5\text{V}$

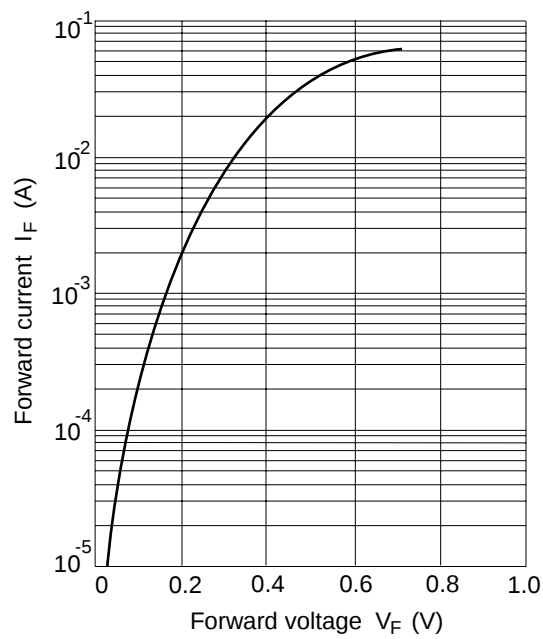


Fig.1 Forward current Vs. Forward voltage

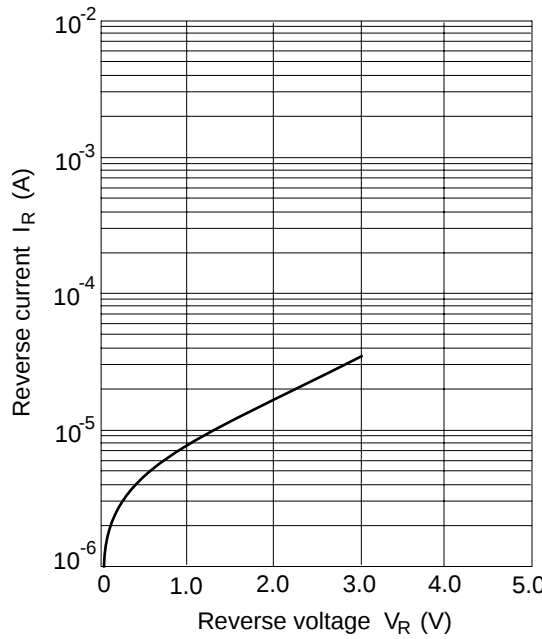


Fig.2 Reverse current Vs. Reverse voltage

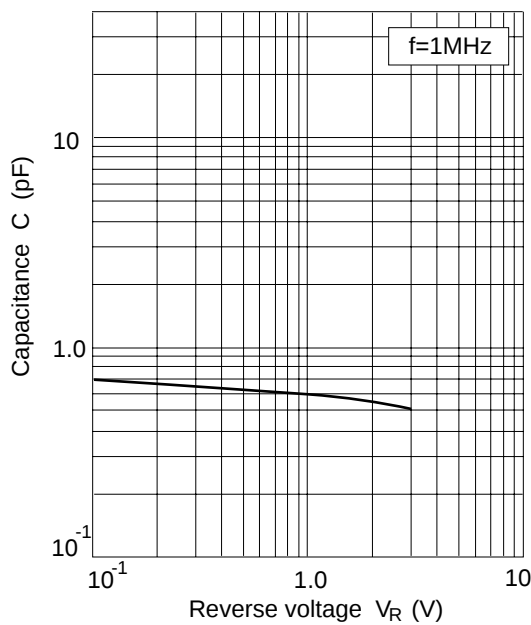


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm

