

HSM276SR

Silicon Schottky Barrier Diode for Balanced Mixer

HITACHI

ADE-208-040D (Z)

Rev. 4

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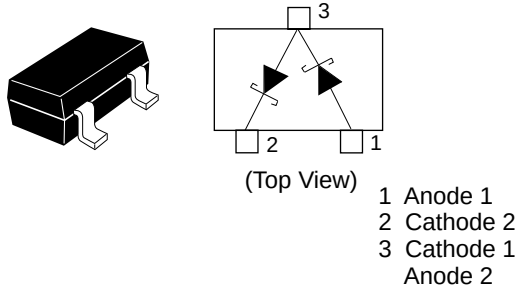
Features

- 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



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	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

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

- Notes: 1. Per one device
2. Failure Criterrion; $I_R \geq 100\mu\text{A}$ at $V_R = 0.5\text{V}$

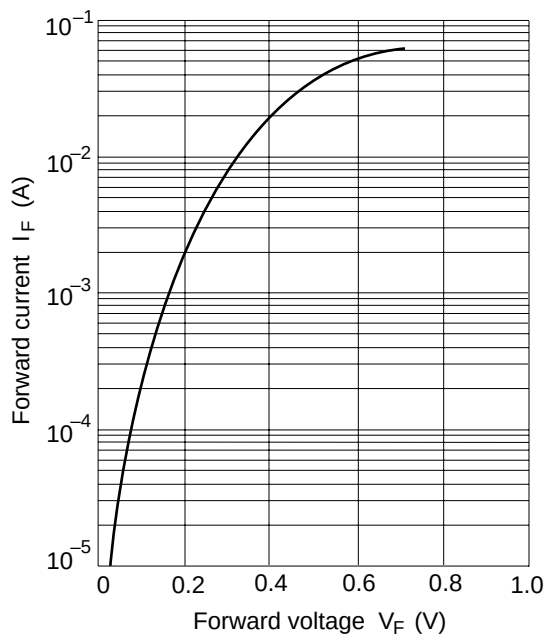
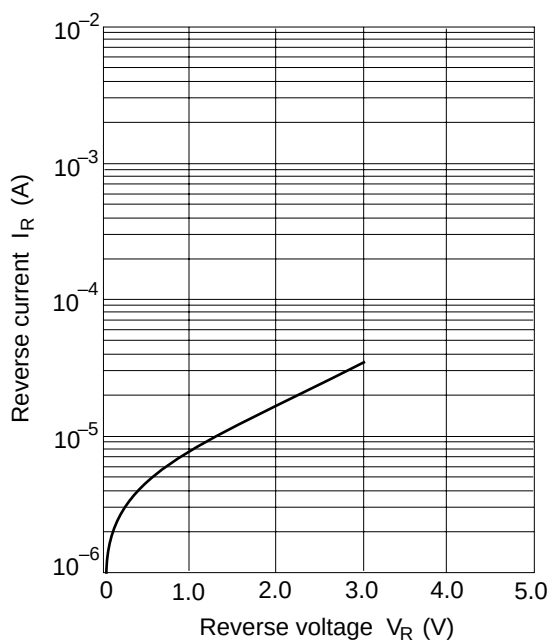
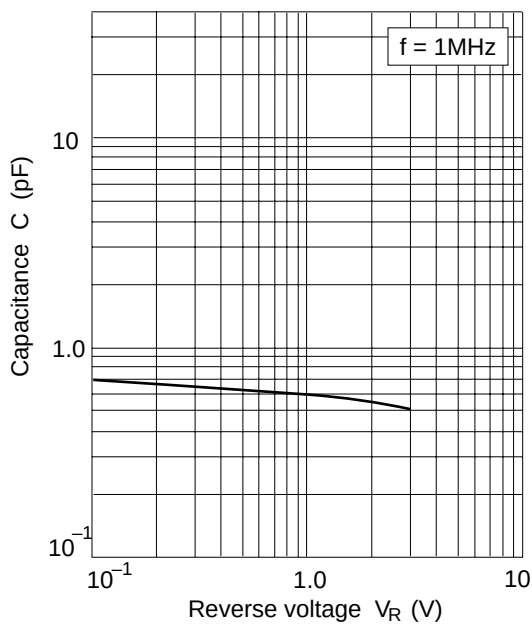


Fig.1 Forward current Vs. Forward voltage

**Fig.2 Reverse current Vs. Reverse voltage****Fig.3 Capacitance Vs. Reverse voltage**

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