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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

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HSM276SR

Silicon Schottky Barrier Diode for Balanced Mixer



ADE-208-040D (Z)

Rev. 4
Aug. 1994

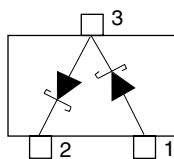
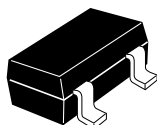
Features

- 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	Tj	125	°C
Storage temperature	Tstg	−55 to +125	°C

Note: Per one device

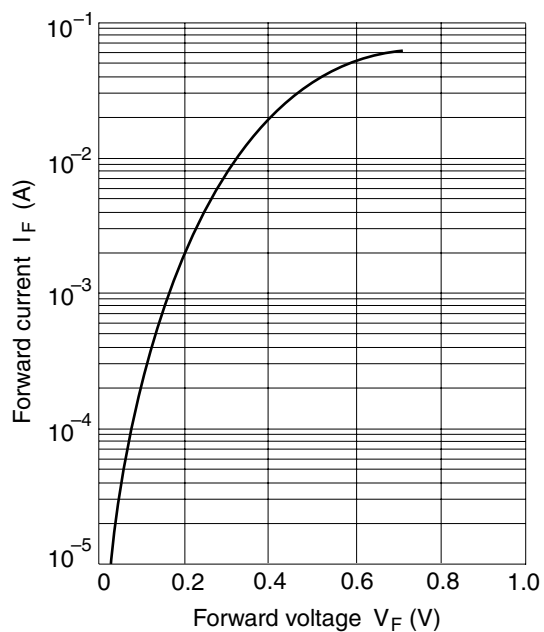
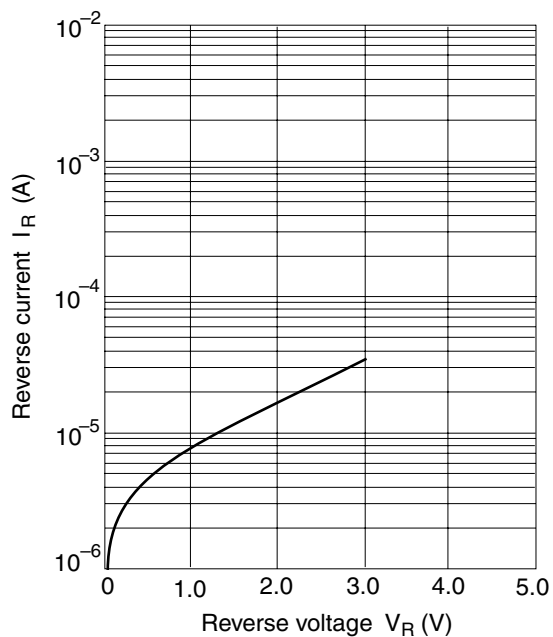
Electrical Characteristics ^{*1}

(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	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 = 1MHz
Capacitance deviation	ΔC	—	—	0.10	pF	$V_R = 0.5\text{V}$, f = 1MHz
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**

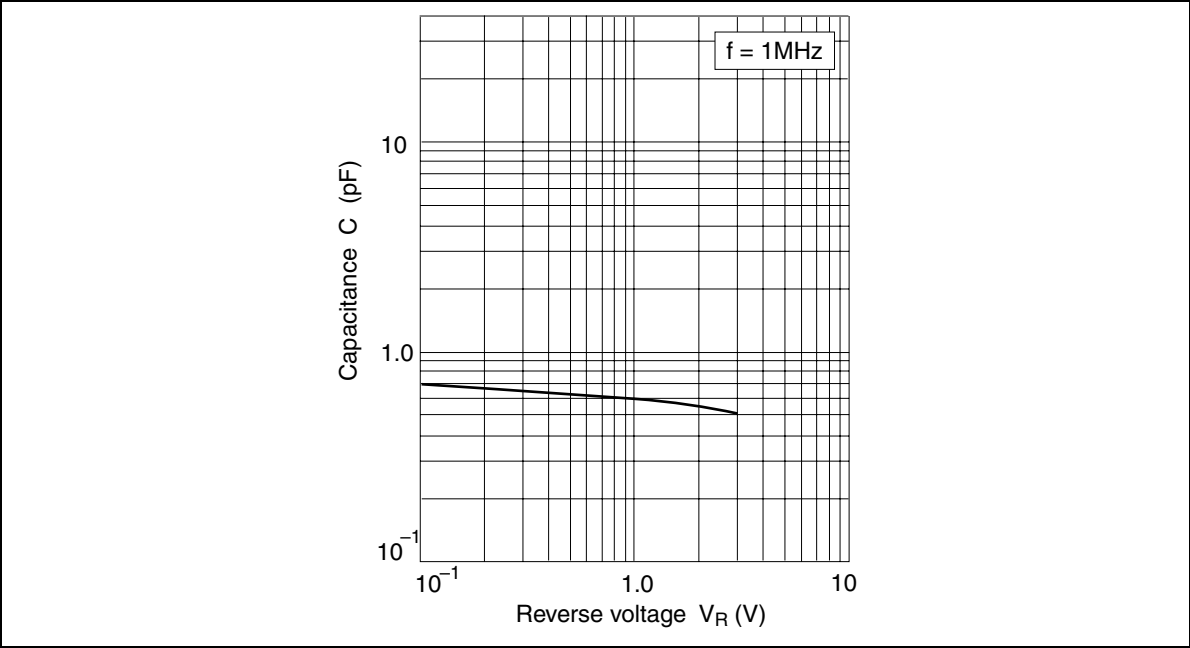
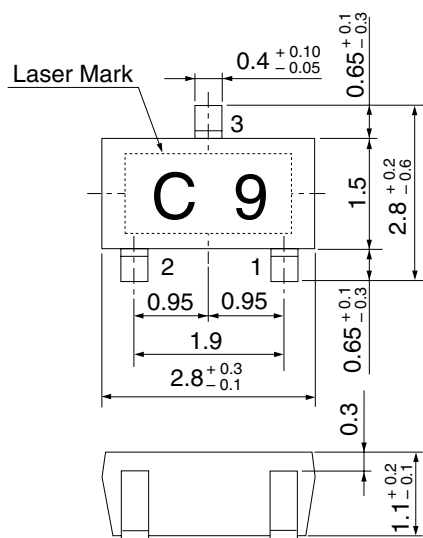


Fig.3 Capacitance Vs. Reverse voltage

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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