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

Cautions

Keep safety first in your circuit designs!

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Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

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HSM276SR

Silicon Schottky Barrier Diode for Balanced Mixer



ADE-208-040D (Z)

Rev. 4
Aug. 1994

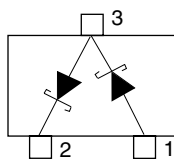
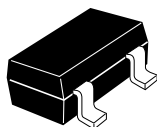
Features

- 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

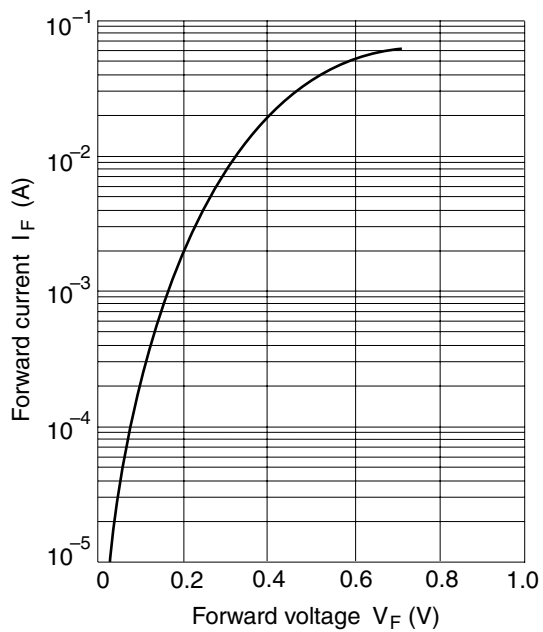
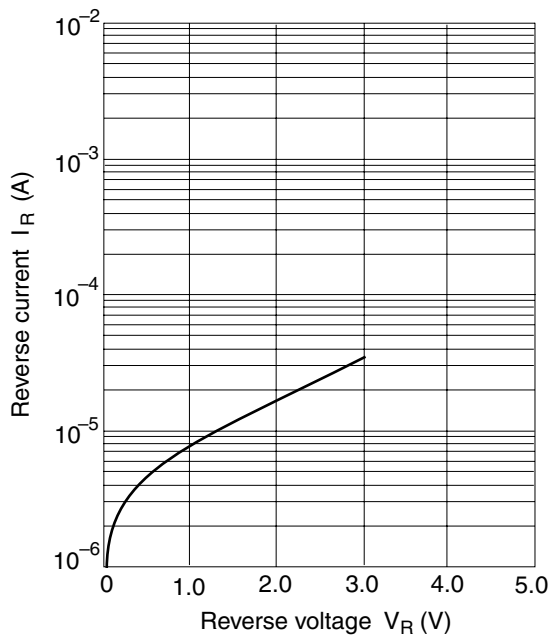
Electrical Characteristics ^{*1}

(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 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**

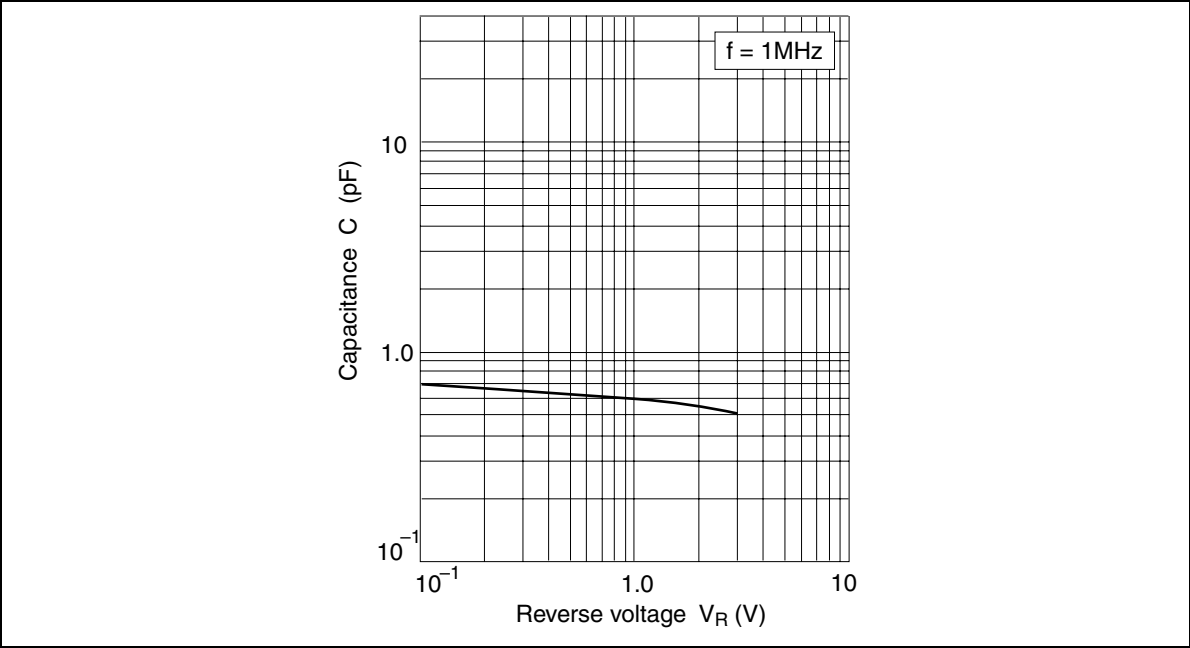
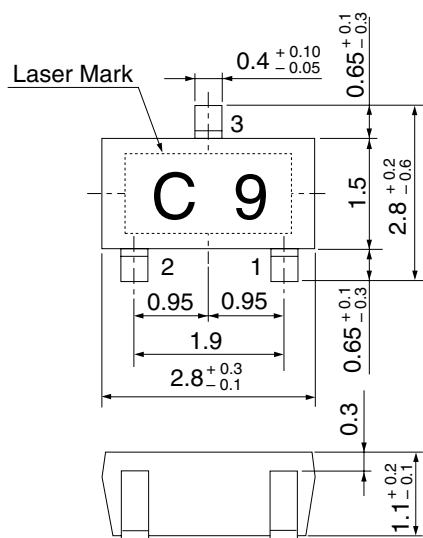


Fig.3 Capacitance Vs. Reverse voltage

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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Sales Offices**HITACHI****Hitachi, Ltd.**

Semiconductor & Integrated Circuits

Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan

Tel: (03) 3270-2111 Fax: (03) 3270-5109

URL	NorthAmerica	: http://semiconductor.hitachi.com/
	Europe	: http://www.hitachi-eu.com/hel/ecg
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For further information write to:

Hitachi Semiconductor (America) Inc.	Hitachi Europe Ltd.
179 East Tasman Drive	Electronic Components Group
San Jose, CA 95134	Whitebrook Park
Tel: <1> (408) 433-1990	Lower Cookham Road
Fax: <1> (408) 433-0223	Maidenhead
	Berkshire SL6 8YA, United Kingdom
	Tel: <44> (1628) 585000
	Fax: <44> (1628) 585200

Hitachi Europe GmbH
Electronic Components Group
Dornacher Straße 3
D-85622 Feldkirchen, Munich
Germany
Tel: <49> (89) 9 9180-0
Fax: <49> (89) 9 29 30 00

Hitachi Asia Ltd.
Hitachi Tower
16 Collyer Quay #20-00
Singapore 049318
Tel: <65>-538-6533/538-8577
Fax: <65>-538-6933/538-3877
URL: http://www.hitachi.com.sg

Hitachi Asia Ltd.
(Taipei Branch Office)
4/F, No. 167, Tun Hwa North Road
Hung-Kuo Building
Taipei (105), Taiwan
Tel: <886>-(2)-2718-3666
Fax: <886>-(2)-2718-8180
Telex: 23222 HAS-TP
URL: http://www.hitachi.com.tw

Hitachi Asia (Hong Kong) Ltd.
Group III (Electronic Components)
7/F., North Tower
World Finance Centre,
Harbour City, Canton Road
Tsim Sha Tsui, Kowloon
Hong Kong
Tel: <852>-(2)-735-9218
Fax: <852>-(2)-730-0281
URL: http://semiconductor.hitachi.com.hk

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