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

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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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HSM276AS

Silicon Schottky Barrier Diode for Balanced Mixer



ADE-208-839 (Z)

Rev. 0
Feb. 2000

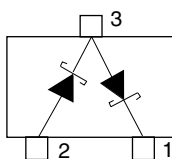
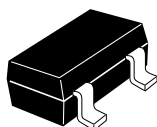
Features

- High forward current, Low capacitance.
- HSM276AS 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
HSM276AS	S19	MPAK

Pin Arrangement



(Top View)

- 1 Cathode 2
- 2 Anode 1
- 3 Cathode 1
Anode 2

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	5	V
Reverse voltage	V_R	3	V
Average rectified current	I_O^*	30	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

Note: Per one device

Electrical Characteristics^{*2}

(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	$V_R = 0.5 \text{ V}, f = 1 \text{ MHz}$
Capacitance deviation	ΔC	—	—	0.10	pF	$V_R = 0.5 \text{ V}, f = 1 \text{ MHz}$
ESD-Capability ^{*1}	—	30	—	—	V	C=200pF, R = 0 Ω

Both forward and reverse direction 1pulse.

Notes: 1. Failure criterion ; $I_R \geq 100\mu\text{A}$ at $V_R = 0.5 \text{ V}$

2. Per one device

Main Characteristic

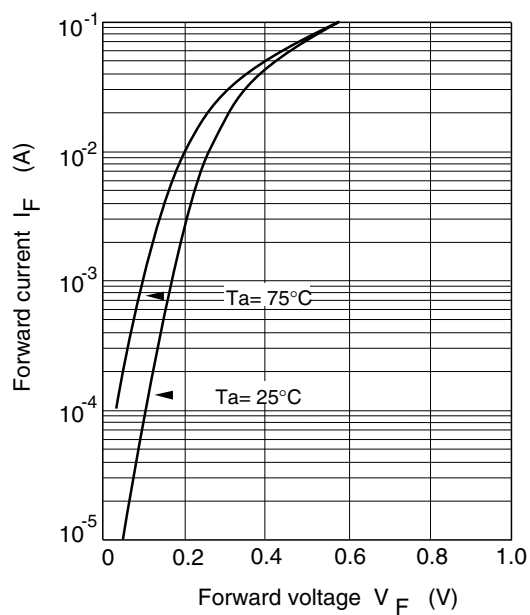


Fig.1 Forward current Vs. Forward voltage

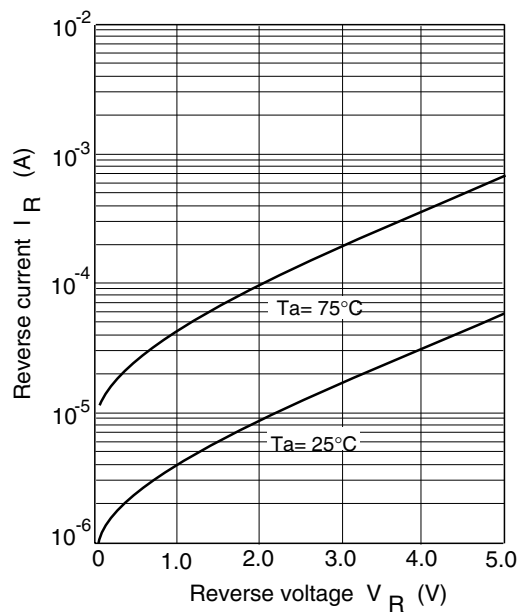


Fig.2 Reverse current Vs. Reverse voltage

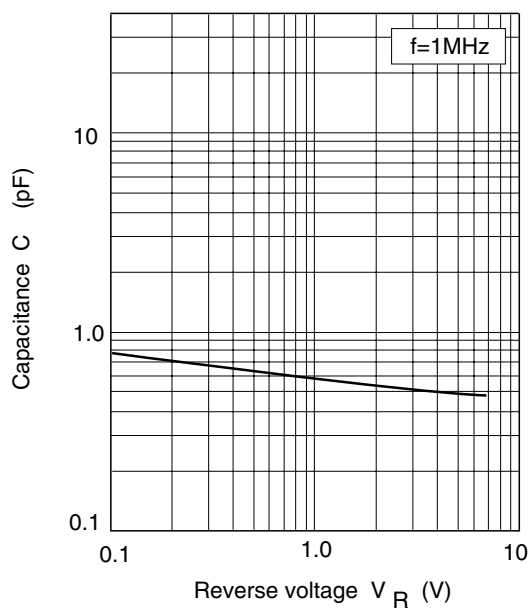
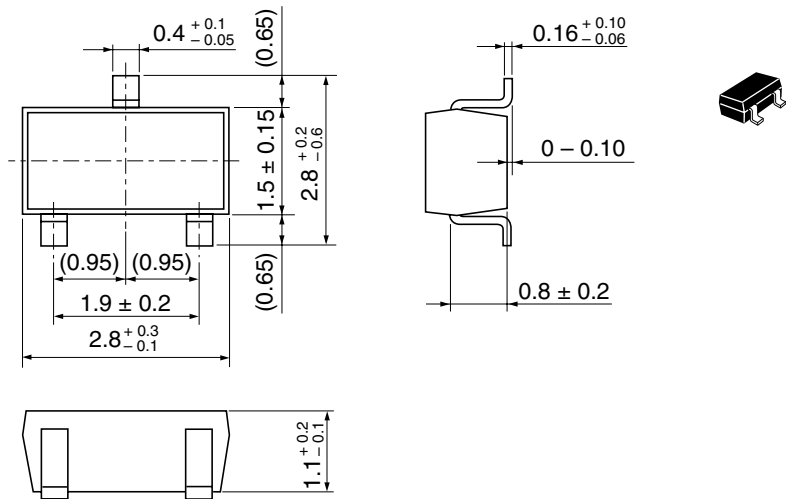


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



Hitachi Code	MPAK
JEDEC	—
EIAJ	Conforms
Mass	0.011 g

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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
	Asia	: http://sicapac.hitachi-asia.com
	Japan	: http://www.hitachi.co.jp/Sicd/indx.htm

For further information write to:

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