

To our customers,

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## Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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# HSM276AS

## Silicon Schottky Barrier Diode for Balanced Mixer

REJ03G0608-0100  
 (Previous: ADE-208-839)  
 Rev.1.00  
 Apr 26, 2005

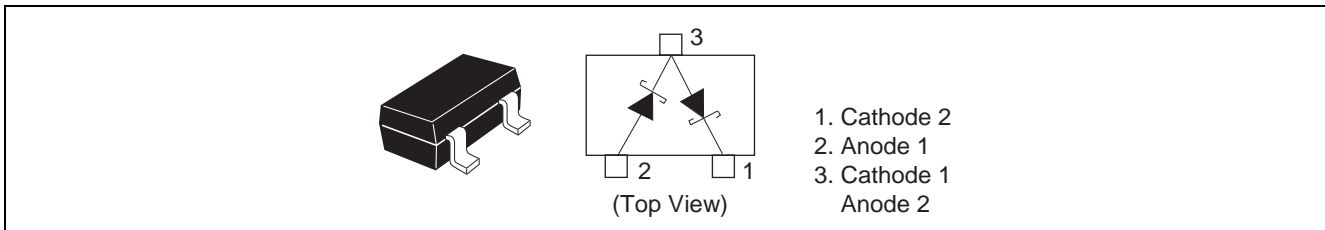
### Features

- 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 Name	Package Code (Previous Code)
HSM276AS	S19	MPAK	PLSP0003ZC-A (MPAK)

### Pin Arrangement



## 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	$I_O^{*1}$	30	mA
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

Note: 1. 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	$\mu\text{A}$	$V_R = 0.5 \text{ V}$
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	$\Delta C$	—	—	0.10	pF	$V_R = 0.5 \text{ V}, f = 1 \text{ MHz}$
ESD-Capability *2	—	30	—	—	V	$C = 200 \text{ pF}, R = 0 \Omega$ , Both forward and reverse direction 1 pulse.

Notes: 1. Per one device

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

Main Characteristic

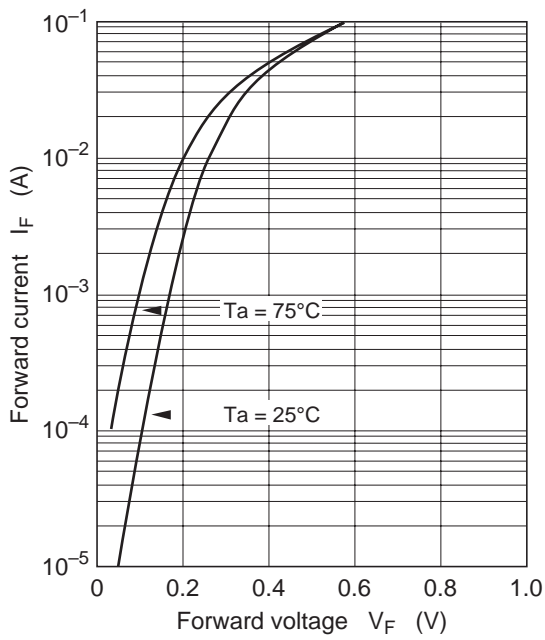


Fig.1 Forward current vs. Forward voltage

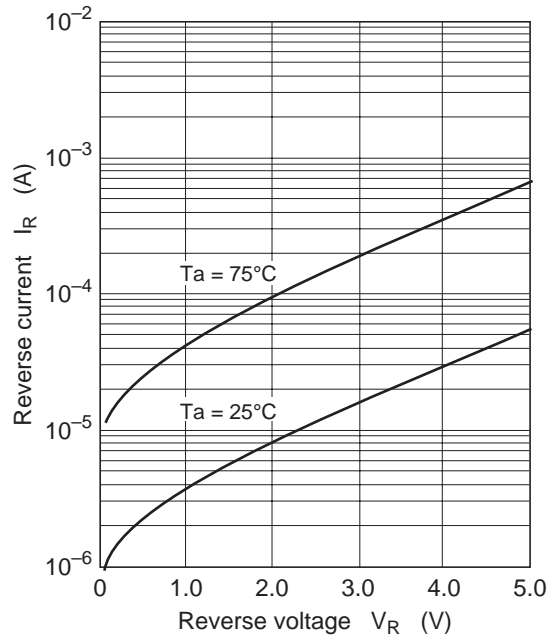


Fig.2 Reverse current vs. Reverse voltage

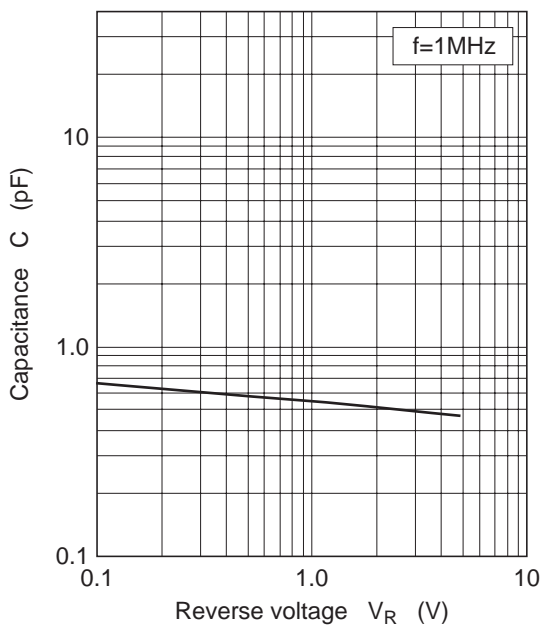
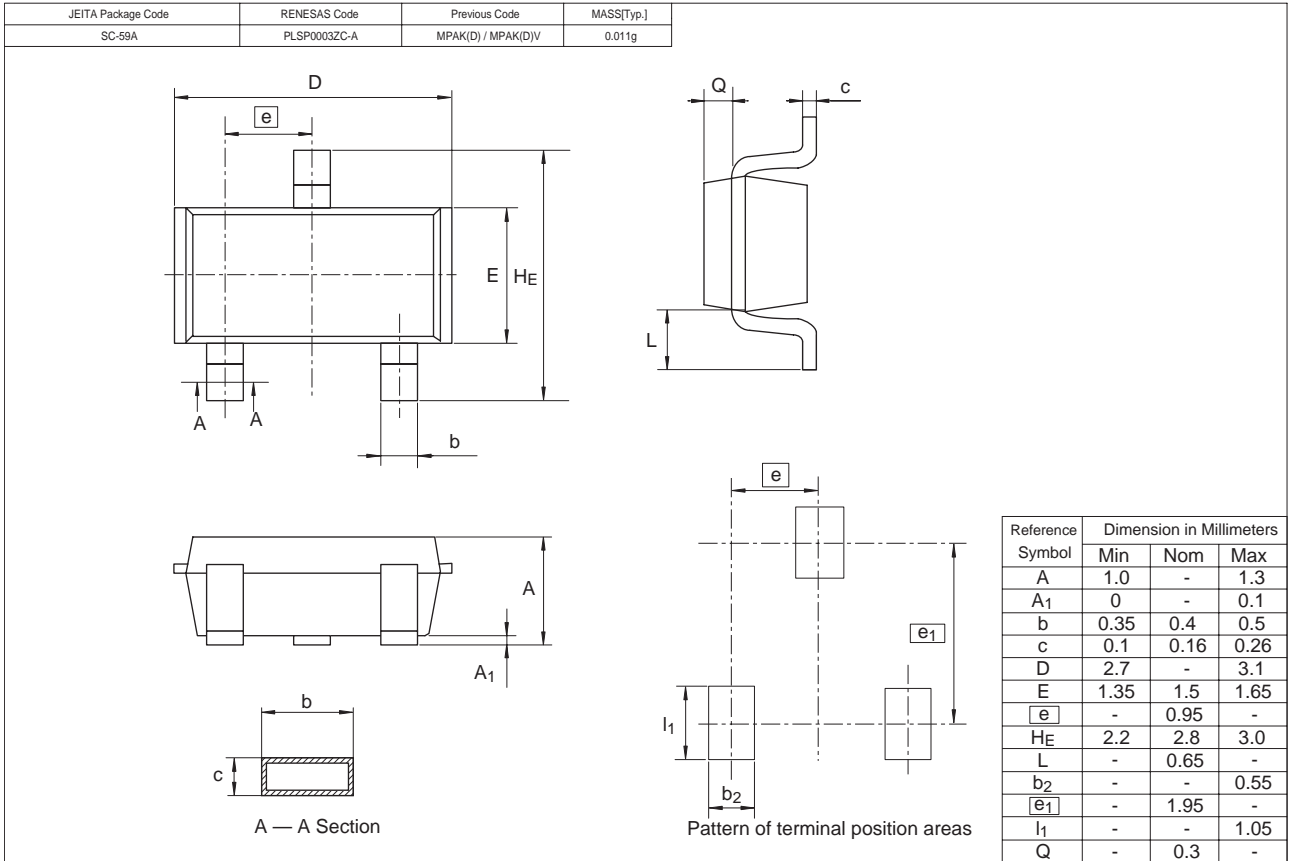


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions



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