To all our customers

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

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Keep safety first in your circuit designs!

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HSB276AS

Silicon Schottky Barrier Diode for Balanced Mixer

ADE-208-838(Z)

Rev. 0
Feb. 2000

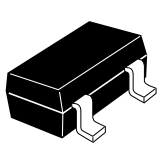
Features

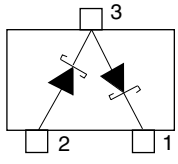
- High forward current, Low capacitance.
- HSB276AS which is interconnected in series configuration is designed for balanced mixer use.
- CMPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HSB276AS	E8	CMPAK

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 [*1]	30	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

Note 1. Per one device

Electrical Characteristics [*2]

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	V_R	3	—	—	V	I_R = 1 mA
Reverse current	I_R	—	—	50	µA	V_R = 0.5V
Forward current	I_F	35	—	—	mA	V_F = 0.5V
Capacitance	C	—	—	0.90	pF	V_R = 0.5V, f = 1 MHz
Capacitance deviation	Δ C	—	—	0.10	pF	V_R = 0.5V, f = 1 MHz
ESD-Capability [*1]	—	30	—	—	V	C = 200pF , R = 0Ω Both forward and reverse direction 1 pulse.

Note 1. Failure criterion ; $I_R \geq 100\mu A$ at V_R =0.5 V

Note 2. Per one device

Main Characteristic

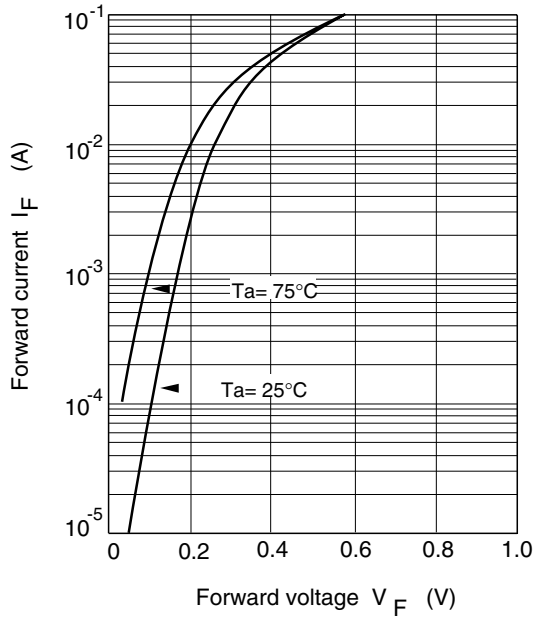


Fig.1 Forward current Vs. Forward voltage

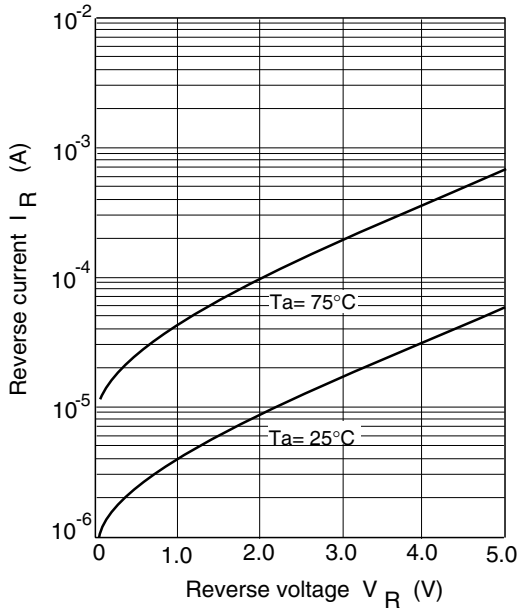


Fig.2 Reverse current Vs. Reverse voltage

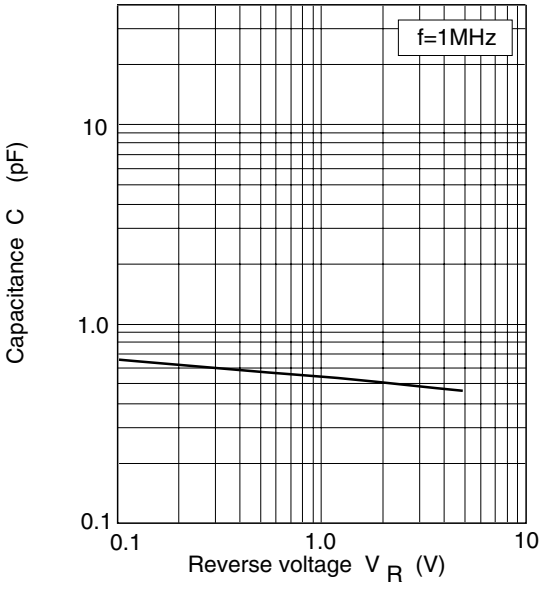
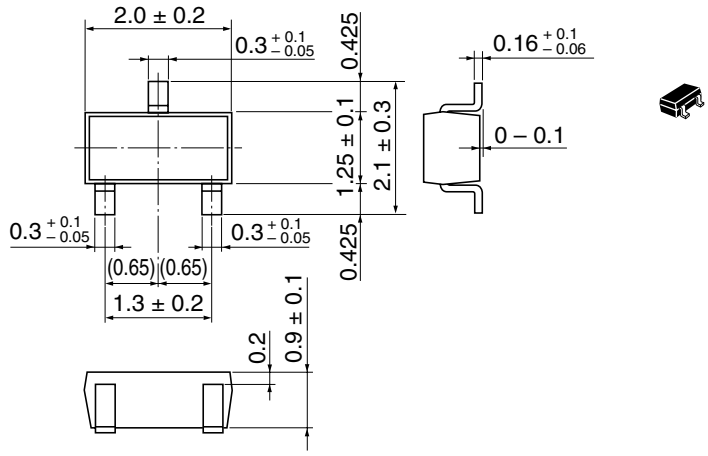


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



Hitachi Code	CMPAK
JEDEC	—
EIAJ	Conforms
Mass	0.006 g

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