

HSB276S

Silicon Schottky Barrier Diode for Detector and Mixer

REJ03G0133-0100Z
(Previous: ADE-208-780)
Rev.1.00
Nov.10.2003

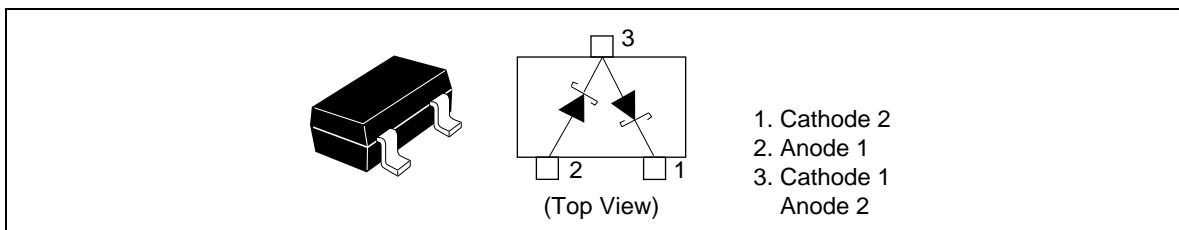
Features

- High forward current, Low capacitance.
- HSB276S 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
HSB276S	C2	CMPAK

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
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	—	—	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	—	—	0.9	pF	$V_R = 0.5 \text{ V}$, $f = 1 \text{ MHz}$
Capacitance deviation	ΔC	—	—	0.1	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.

Note: 1. Per one device

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

Main Characteristics

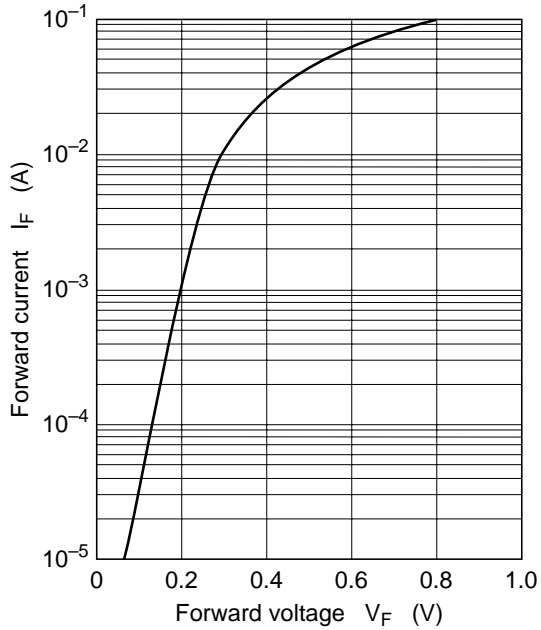


Fig.1 Forward current vs. Forward voltage

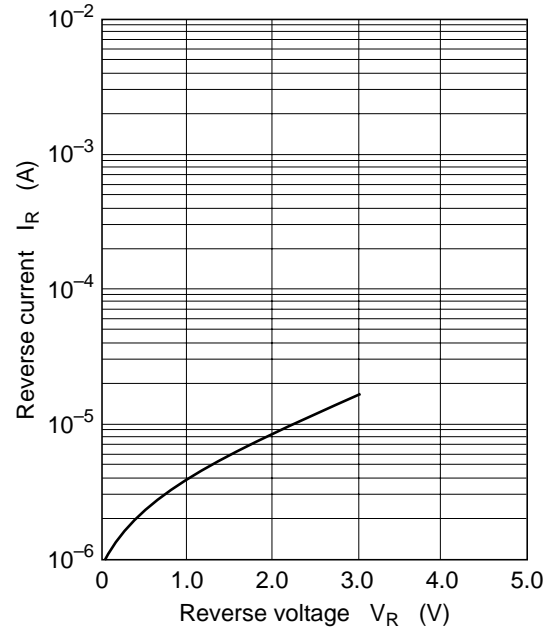


Fig.2 Reverse current vs. Reverse voltage

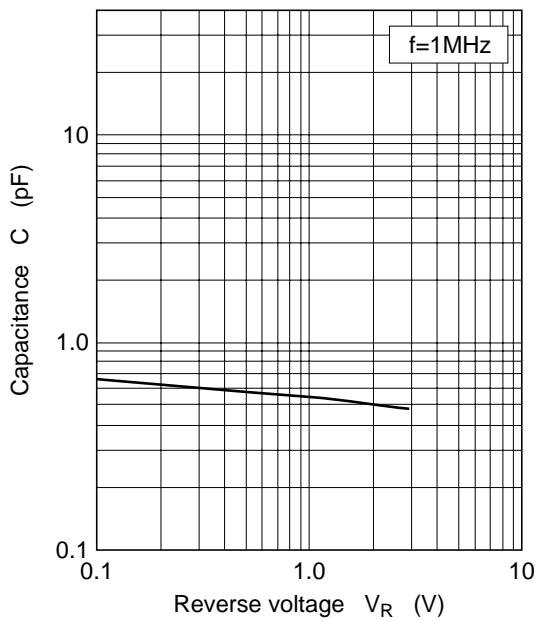
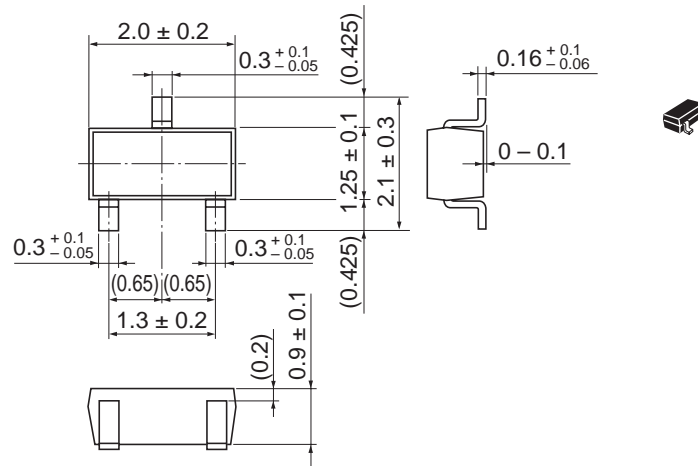


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions

As of January, 2003

Unit: mm



Package Code	CMPAK
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.006 g

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