HSB276S

Silicon Schottky Barrier Diode for Detector and Mixer

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

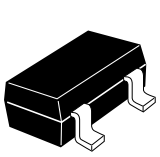
Features

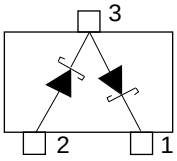
- High forward current, Low capacitance.
- HSB276S which is interconnected in series configuration is designed for balanced mixer use.
- CMPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HSB276S	C2	CMPAK

Pin Arrangement





(Top View)

1. Cathode 2
2. Anode 1
3. Cathode 1
   Anode 2

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	Tj	125	°C
Storage temperature	Tstg	–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 mA
Reverse current	I_R	—	—	50	μA	V_R = 0.5 V
Forward current	I_F	35	—	—	mA	V_F = 0.5 V
Capacitance	C	—	—	0.9	pF	V_R = 0.5 V, f = 1 MHz
Capacitance deviation	ΔC	—	—	0.1	pF	V_R = 0.5 V, f = 1 MHz
ESD-Capability [*2]	—	30	—	—	V	C = 200 pF, R = 0 Ω , Both forward and reverse direction 1 pulse.

Note: 1. Per one device
2. Failure criterion ; $I_R \geq 100$ μA at V_R = 0.5 V

Main Characteristics

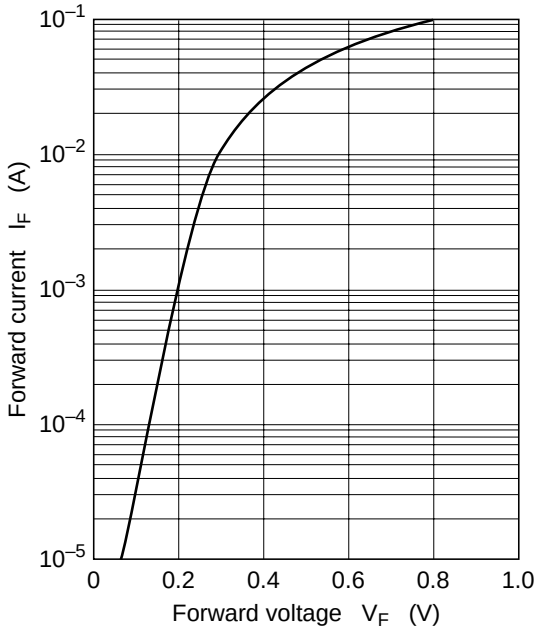


Fig.1 Forward current vs. Forward voltage

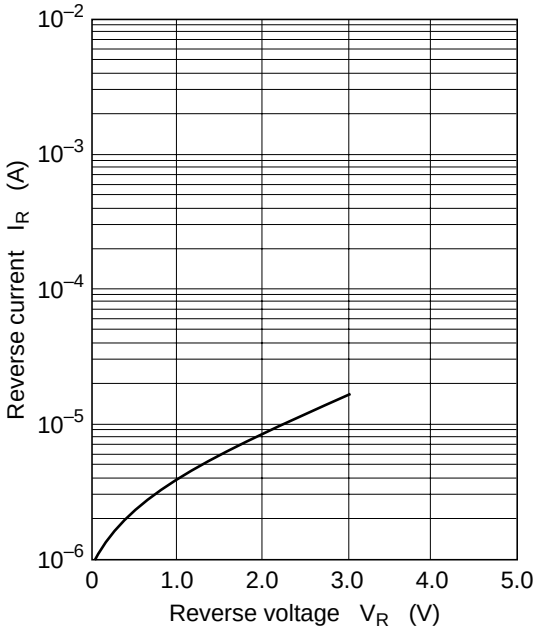


Fig.2 Reverse current vs. Reverse voltage

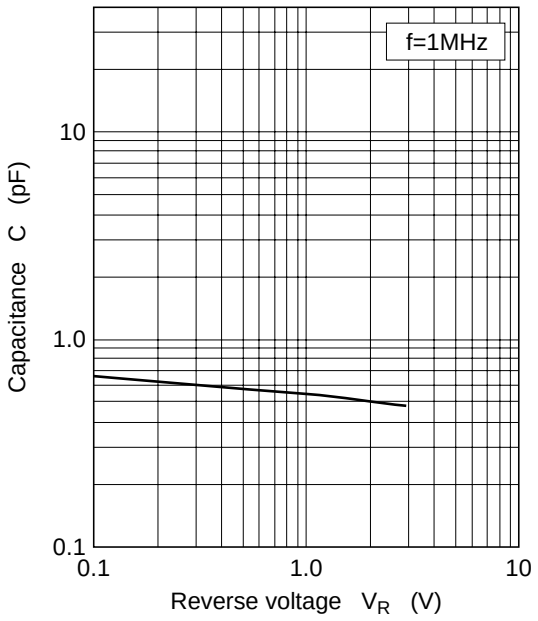
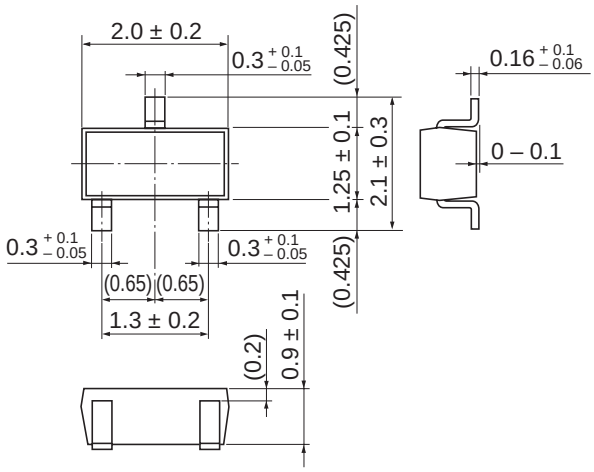


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions

As of January, 2003

Unit: mm



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

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