

HSB276S

Silicon Schottky Barrier Diode for Balanced Mixer

HITACHI

ADE-208-780 (Z)
Rev 0
Mar. 1999

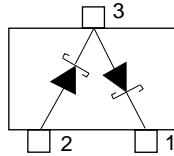
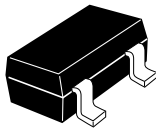
Features

- 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

Outline



(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	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Note 1. Per one device

Electrical Characteristics (Ta = 25°C) *2

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	—	—	0.90	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	$C=200\text{pF}$, Both forward and reverse direction 1 pulse.

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

Note 2. Per one device

Main Characteristic

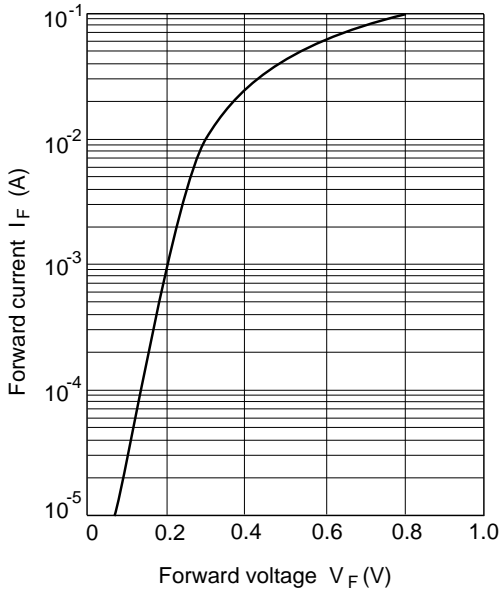


Fig.1 Forward current Vs. Forward voltage

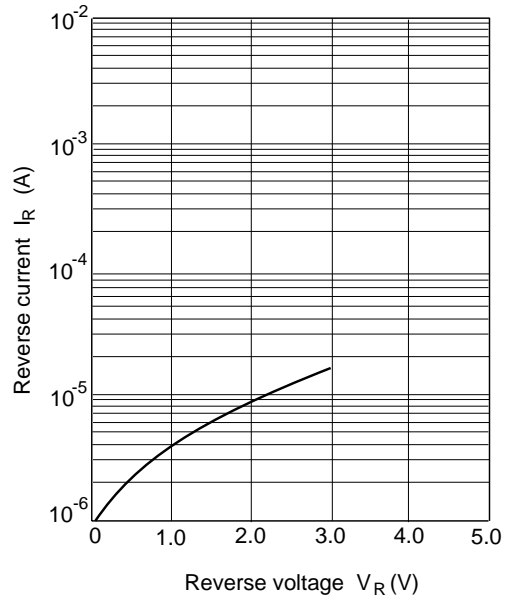


Fig.2 Reverse current Vs. Reverse voltage

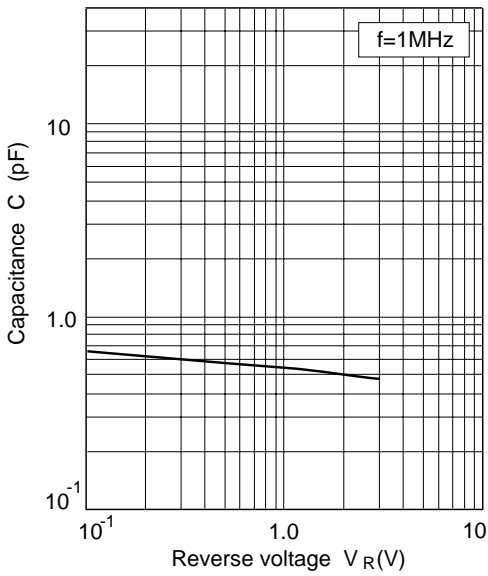
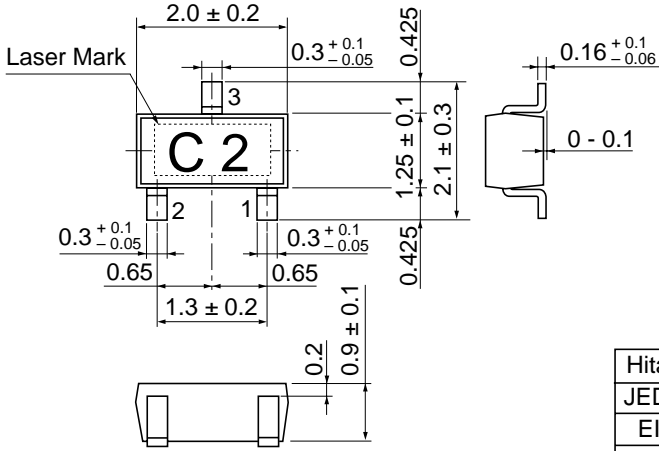


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit : mm



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

Hitachi Code	CMPAK
JEDEC Code	—
EIAJ Code	SC-70
Weight (g)	0.006

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