

HSC276A

Silicon Schottky Barrier Diode for Mixer

HITACHI

ADE-208-836(Z)

Rev 0

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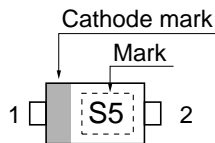
Features

- High forward current, Low capacitance.
- Ultra small Flat Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HSC276A	S5	UFP

Outline



1. Cathode
2. Anode

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	30	mA
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Electrical Characteristics (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	–	–	0.85	pF	$V_R = 0.5\text{V}, f = 1 \text{ MHz}$
ESD-Capability ¹	–	30	–	–	V	$C=200\text{pF}, R = 0\Omega,$ Both forward and reverse direction 1 pulse.

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

Main Characteristic

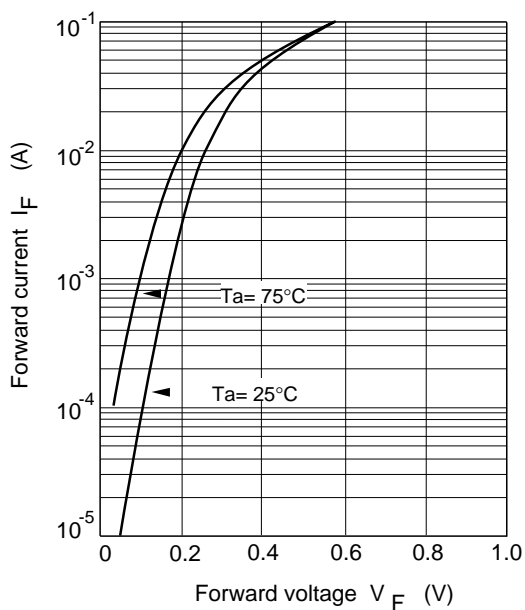


Fig.1 Forward current Vs. Forward voltage

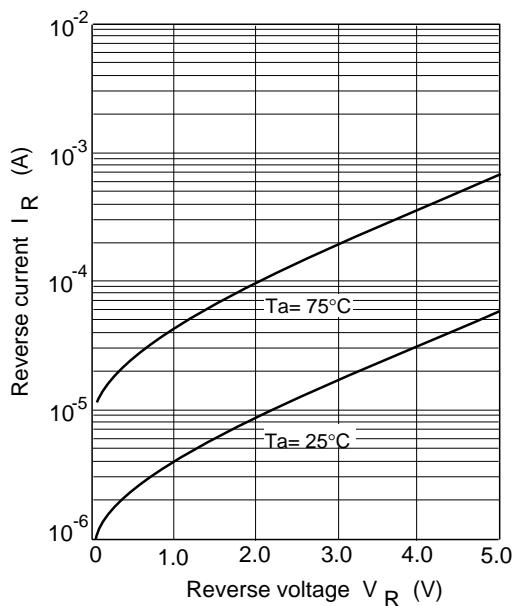


Fig.2 Reverse current Vs. Reverse voltage

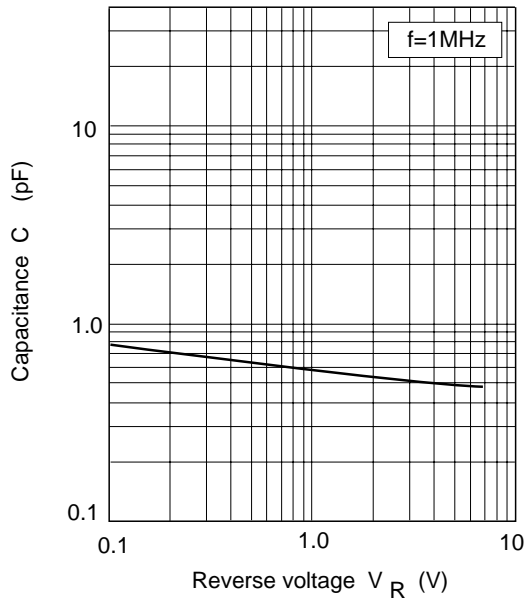
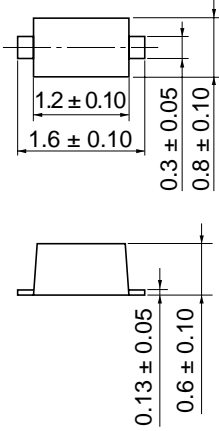


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



Hitachi Code	UFP
JEDEC	—
EIAJ	Conforms
Mass	0.0016 g

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