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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   Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

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HSC278

Silicon Schottky Barrier Diode

ADE-208-931B (Z)

Rev. 2
Dec. 2000

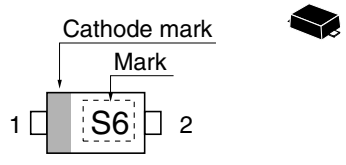
Features

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

Ordering Information

Type No.	Laser Mark	Package Code
HSC278	S6	UFP

Pin Arrangement



1. Cathode
2. Anode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	30	V
Reverse voltage	V_R	30	V
Non-Repetitive peak forward surge current	I_{FSM} *	200	mA
Peak forward current	I_{FM}	150	mA
Average rectified current	I_O	30	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–55 to +125	°C

Note: 10 msec sine wave 1 pulse

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	—	—	0.30	V	I_F = 1 mA
	V_{F2}	—	—	0.95		I_F = 30 mA
Reverse current	I_R	—	—	700	nA	V_R = 10 V
Capacitance	C	—	—	1.50	pF	V_R = 1 V, f = 1 MHz
ESD-Capability *[1]	—	100	—	—	V	C = 200 pF, R_L = 0 Ω, Both forward and reverse direction 1 pulse.

Note: 1. Failure criterion ; $I_R \geq 1.4$ μA at V_R = 10 V

Main Characteristic

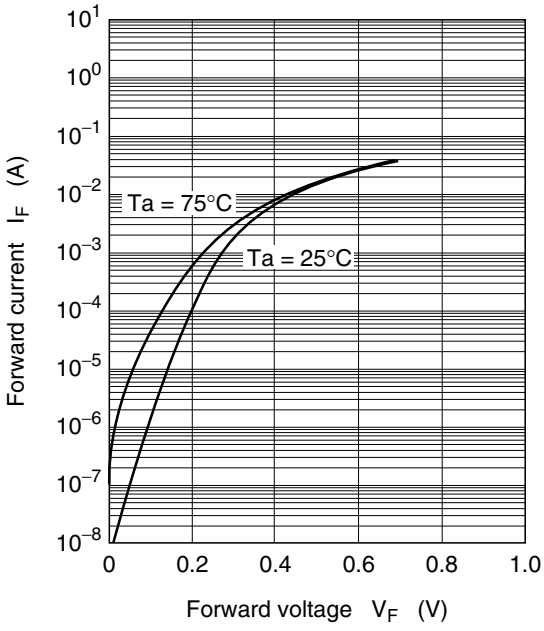


Fig.1 Forward current Vs. Forward voltage

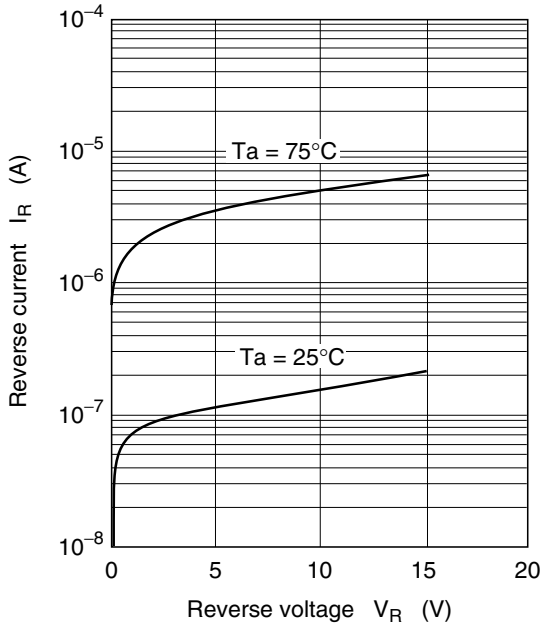


Fig.2 Reverse current Vs. Reverse voltage

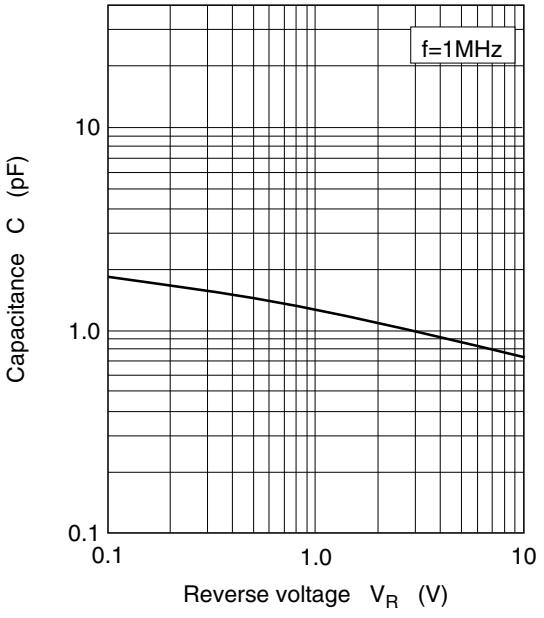
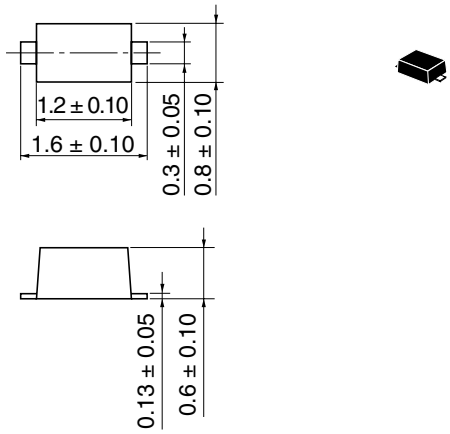


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



Hitachi Code	UFP
JEDEC	—
EIAJ	Conforms
Mass (reference value)	0.0016 g

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