HSC278

Silicon Schottky Barrier Diode for Detector

REJ03G0601-0300
(Previous: ADE-208-931B)
Rev.3.00
Apr 13, 2005

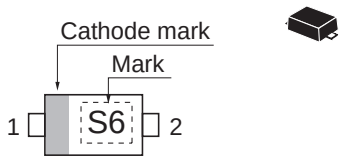
Features

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

Ordering Information

Type No.	Cathode Mark	Package Name	Package Code (Previous Code)
HSC278	S6	UFP	PWSF0002ZA-A (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 ms 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	—	—	1.5	pF	V_R = 1 V, f = 1 MHz
ESD-Capability *	—	100	—	—	V	C = 200 pF, R_L = 0 Ω, Both forward and reverse direction 1 pulse.

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

Main Characteristic

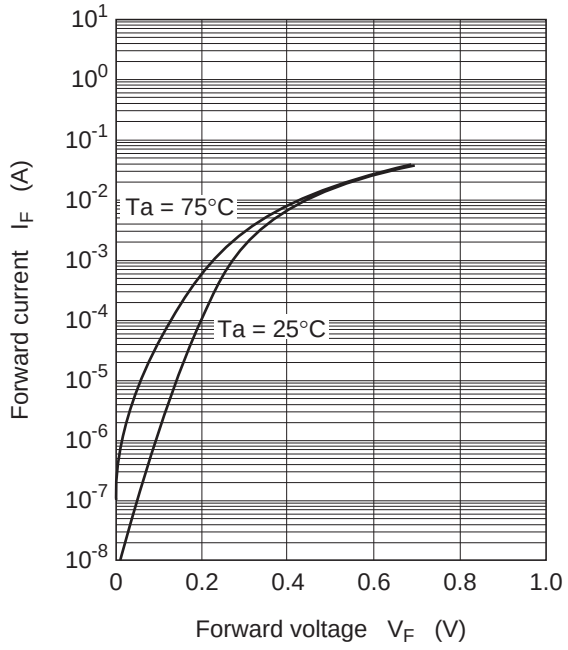


Fig.1 Forward current vs. Forward voltage

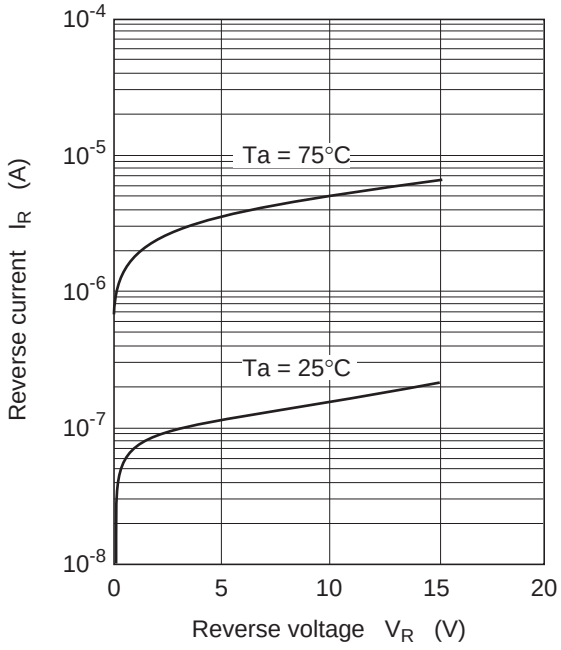


Fig.2 Reverse current vs. Reverse voltage

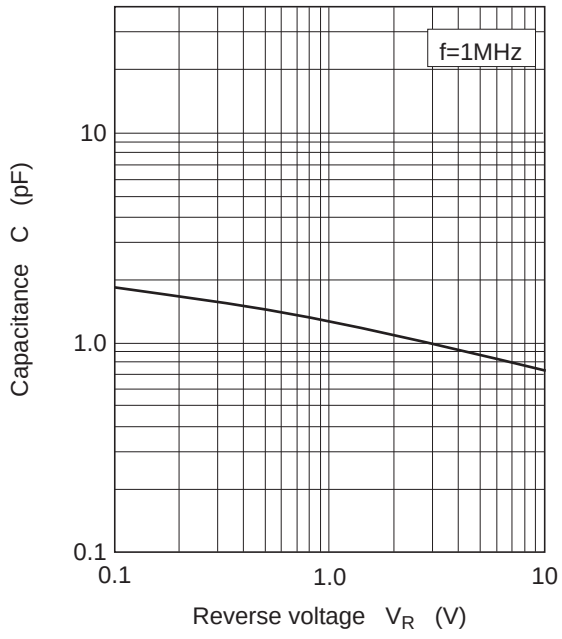
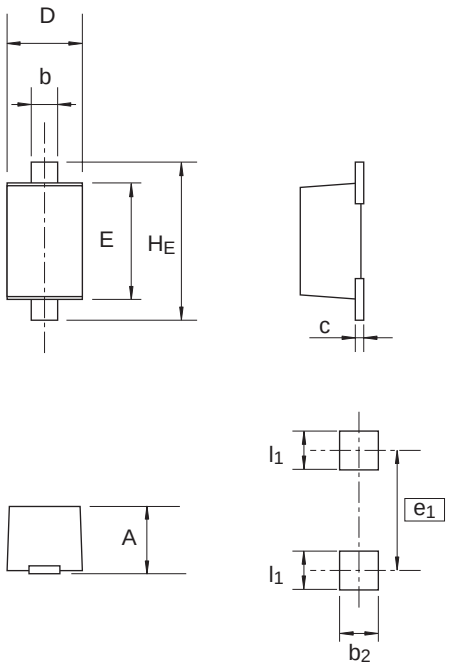


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions

JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
SC-79	PWSF0002ZA-A	UFP / UFPV	0.0016g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.50	0.60	0.70
b	0.25	0.30	0.35
c	0.08	—	0.18
D	0.70	0.80	0.90
E	1.10	1.20	1.30
H_E	1.50	1.60	1.70
b_2	—	0.80	—
e_1	—	1.70	—
l_1	—	0.60	—

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