HSN278WK

Silicon Epitaxial Schottky Barrier Diode for Detector

REJ03G0611-0100
(Previous: ADE-208-1524)
Rev.1.00
Sep 13, 2005

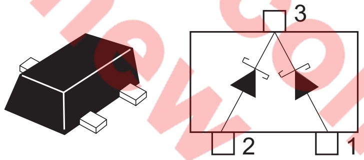
Features

- Low forward voltage, Low capacitance.
- Miniature Flat Lead Package (MFPAK) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code (Previous Code)
HSN278WK	SI–	MFPAK	PUSF0003ZA-A (MFPAK)

Pin Arrangement



(Top View)

1. Anode
2. Anode
3. Cathode

Absolute Maximum Ratings

(Ta = 25°C)

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

Note: 10 ms sine wave 1 pulse one device.

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 ; $I_R \geq 1.4\ \mu A$ at V_R =10 V

Main Characteristic

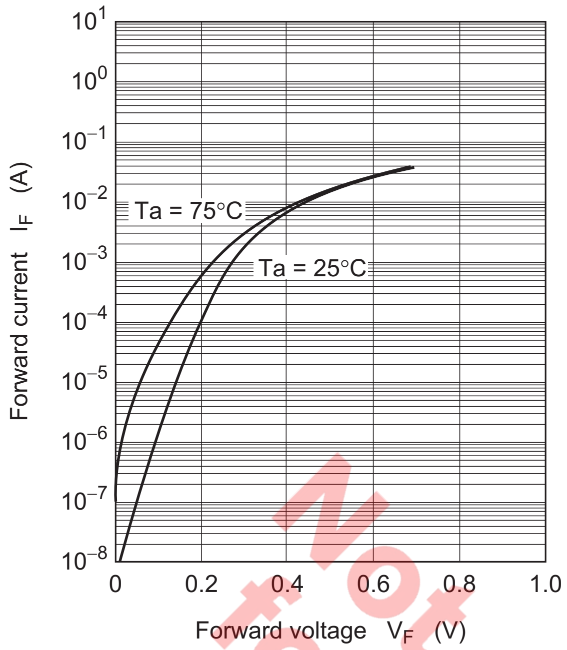


Fig.1 Forward current vs. Forward voltage

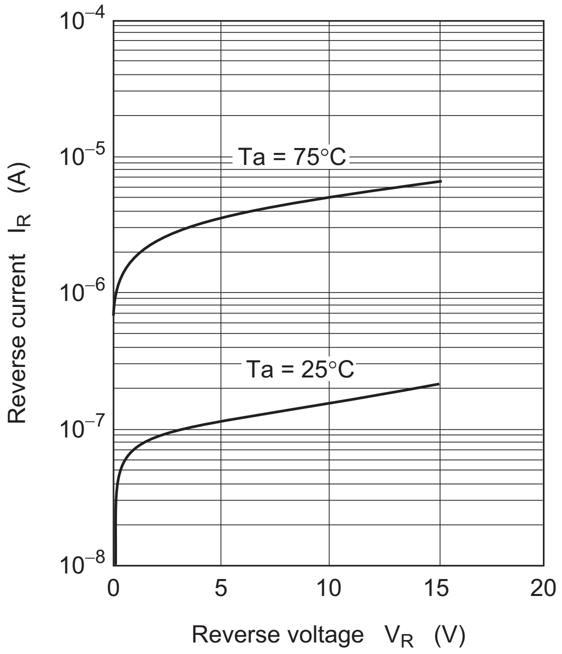


Fig.2 Reverse current vs. Reverse voltage

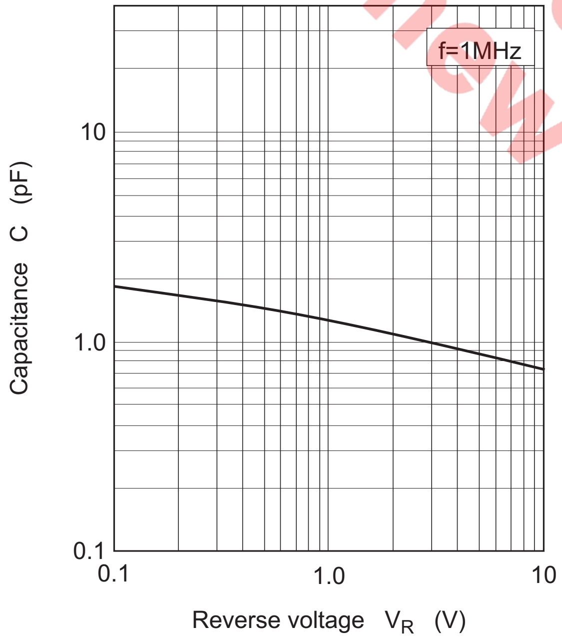
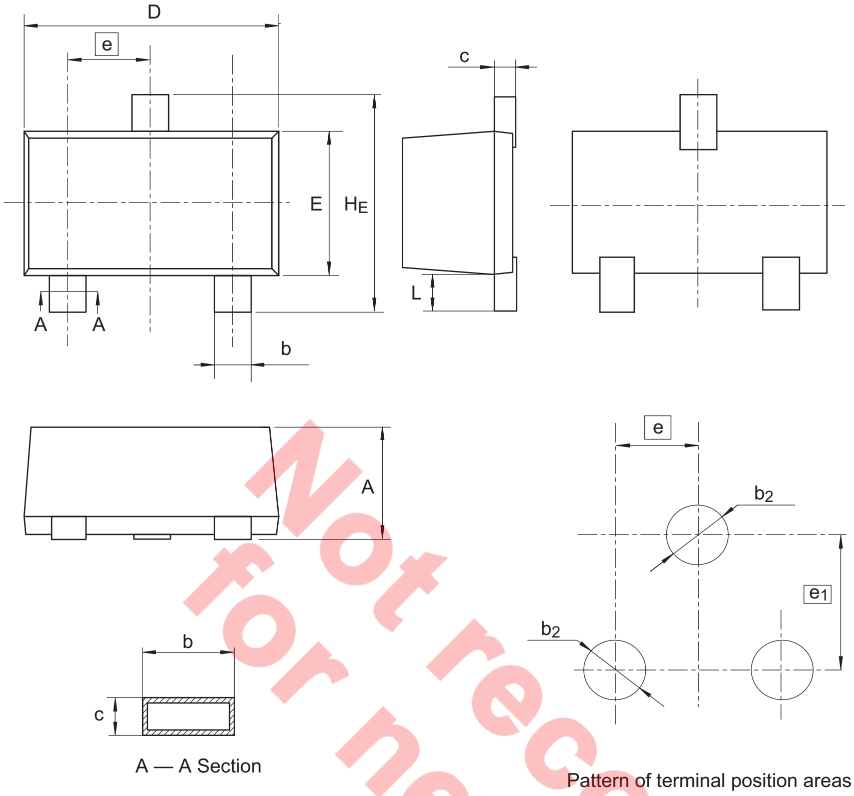


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions

JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
SC-89 Modified	PUSF0003ZA-A	MFPAK / MFPAKV	0.0016g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	-	-	0.6
b	0.15	0.2	0.3
c	0.1	0.15	0.25
D	1.35	1.4	1.45
E	0.7	0.8	0.9
$\boxed{e}$	-	0.45	-
H_E	1.15	1.2	1.25
L	-	0.2	-
b_2	-	ϕ0.45	-
$\boxed{e_1}$	-	1.2	-

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