

HSU83

Silicon Epitaxial Planar Diode for High Voltage Switching

REJ03G0189-0300
 Rev.3.00
 Feb 16, 2005

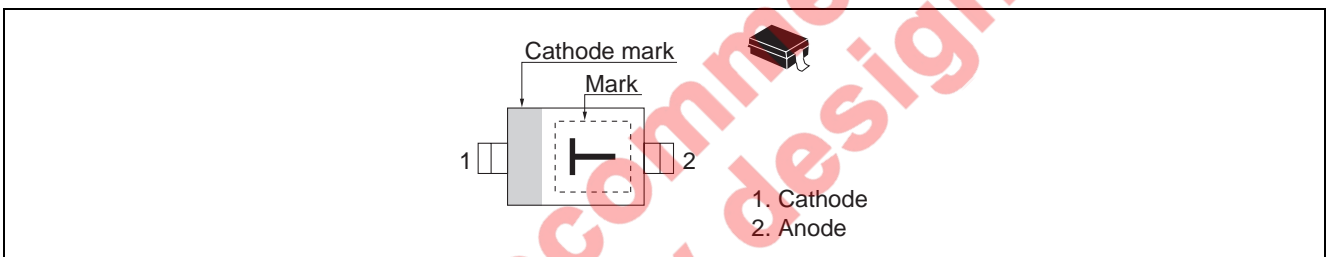
Features

- High reverse voltage. ($V_R = 250\text{ V}$)
- Ultra small Resin Package (URP) is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Renesas Code	Previous Code
HSU83	T	PTSP0002ZA-A	URP

Pin Arrangement



Not recommended for new design

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	300	V
Reverse voltage	V_R	250	V
Peak forward current	I_{FM}	300	mA
Non-Repetitive peak forward surge current	I_{FSM}^{*1}	2	A
Average rectified current	I_o	100	mA
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

Note: 1. Value at duration of 10 ms.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	1.2	V	$I_F = 100 \text{ mA}$
Reverse current	I_{R1}	—	—	0.2	μA	$V_R = 250 \text{ V}$
	I_{R2}	—	—	100		$V_R = 300 \text{ V}$
Capacitance	C	—	—	3.0	pF	$V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$
Reverse recovery time	t_{rr}	—	—	100	ns	$I_F = I_R = 30 \text{ mA}$, $I_{rr} = 3 \text{ mA}$

Not recommended
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Main Characteristics

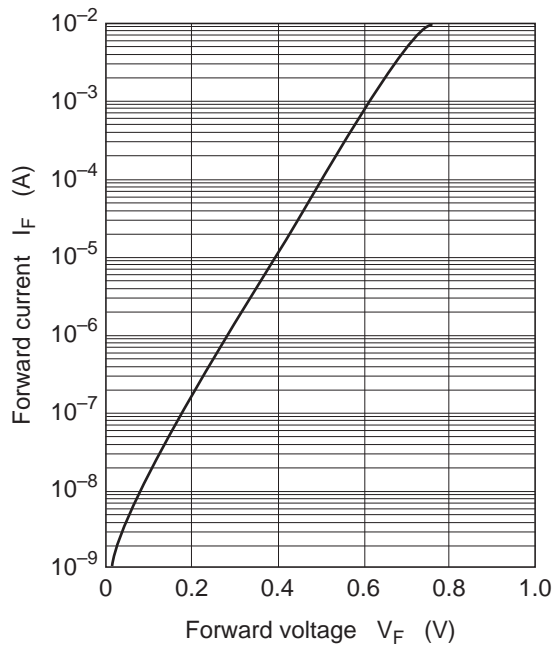


Fig.1 Forward current vs. Forward voltage

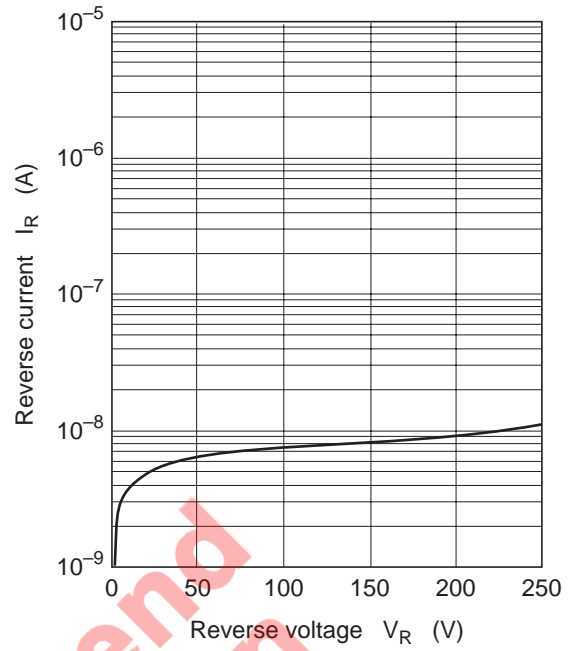


Fig.2 Reverse current vs. Reverse voltage

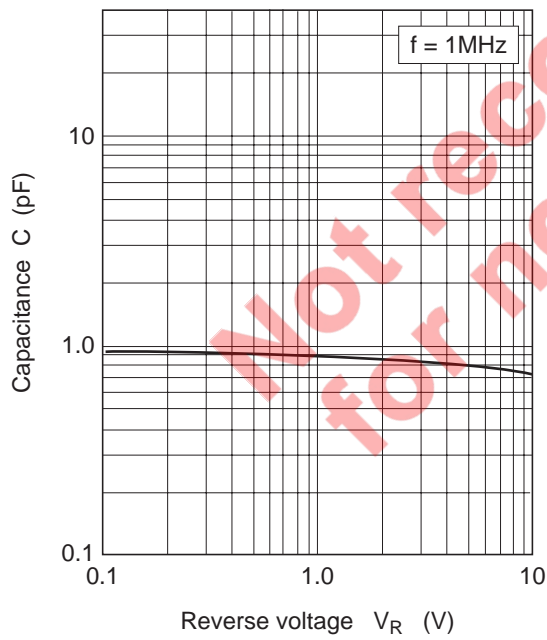
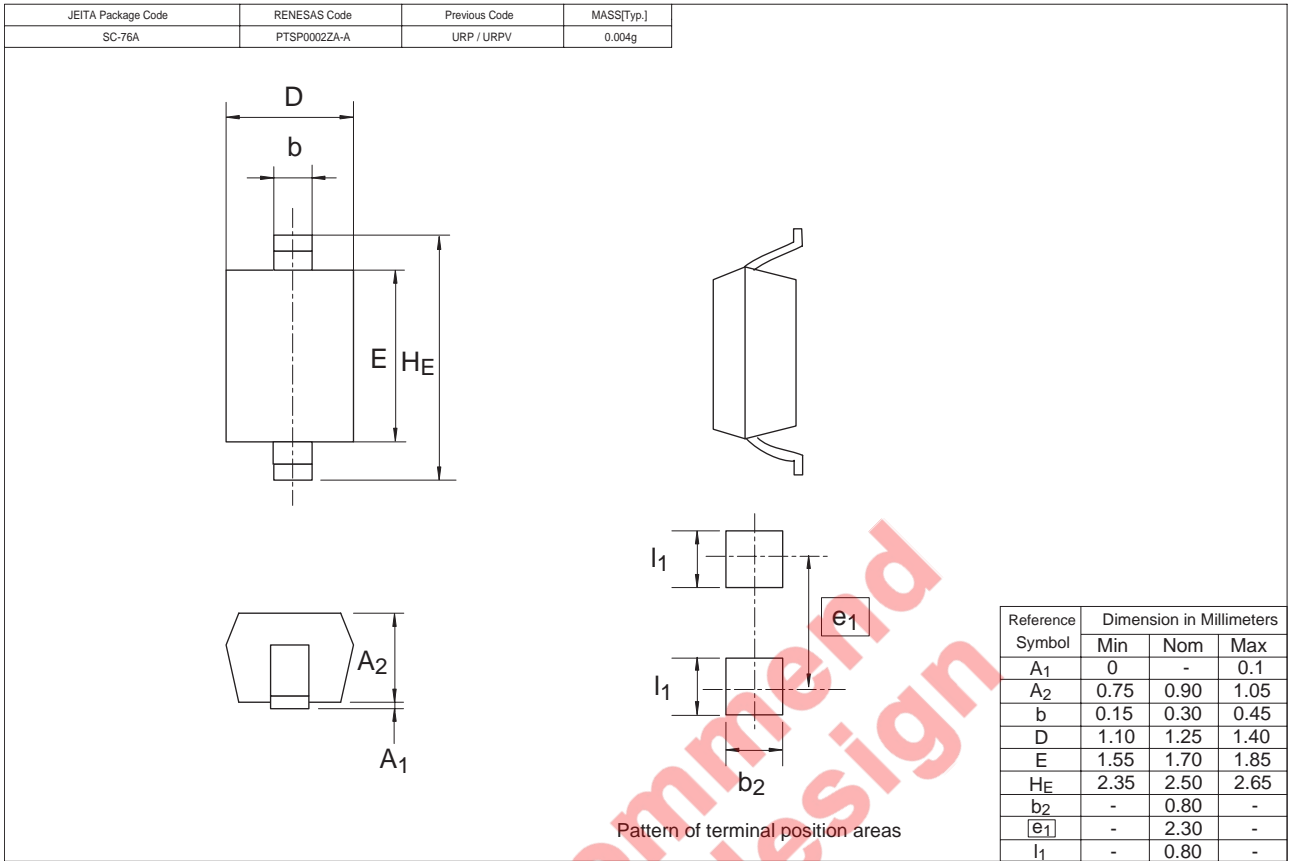


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions



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April 1st, 2010
Renesas Electronics Corporation

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