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Renesas Electronics website: <http://www.renesas.com>

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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Not recommended
for new design

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HSM122

Silicon Epitaxial Planar Diode for High Voltage Switching

REJ03G1299-0100
Rev.1.00
Oct 27, 2005

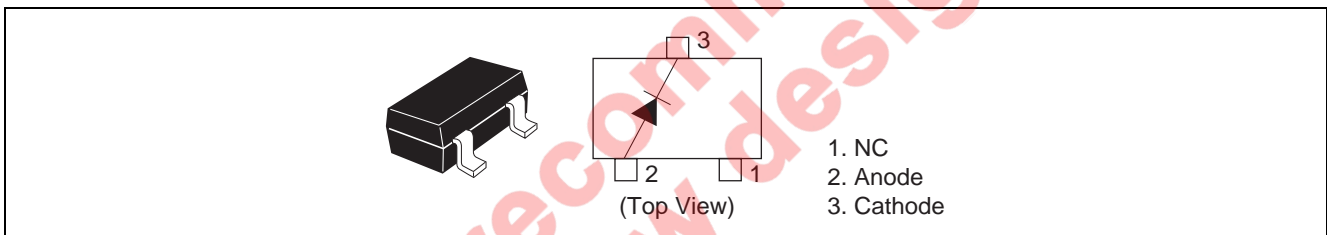
Features

- High reverse voltage. ($V_R = 400\text{ V}$)
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code (Previous Code)
HSM122	F8	MPAK	PLSP0003ZC-A (MPAK)

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	420	V
Reverse voltage	V_R	400	V
Peak forward current	I_{FM}	625	mA
Non-Repetitive peak forward surge current	I_{FSM}^{*1}	1	A
Average rectified current	I_o	150	mA
Power dissipation	P_d^{*2}	150	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Notes: 1. Value at duration of 1s.

2. Standard substrate mounting (20mm × 15mm × 0.8t mm, With Polyimide board)

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_R	—	—	1.0	μA	$V_R = 400 \text{ V}$
Capacitance	C	—	—	10	pF	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$
Reverse recovery time	t_{rr}	—	—	20	μs	$I_F = 30 \text{ mA}, V_R = 10 \text{ V}, R_L = 2 \text{ k}\Omega$

Not recommended
for new designs

Main Characteristic

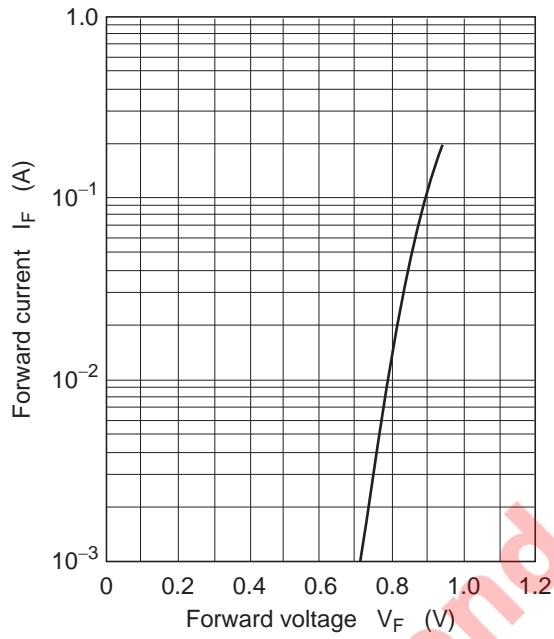


Fig.1 Forward current vs. Forward voltage

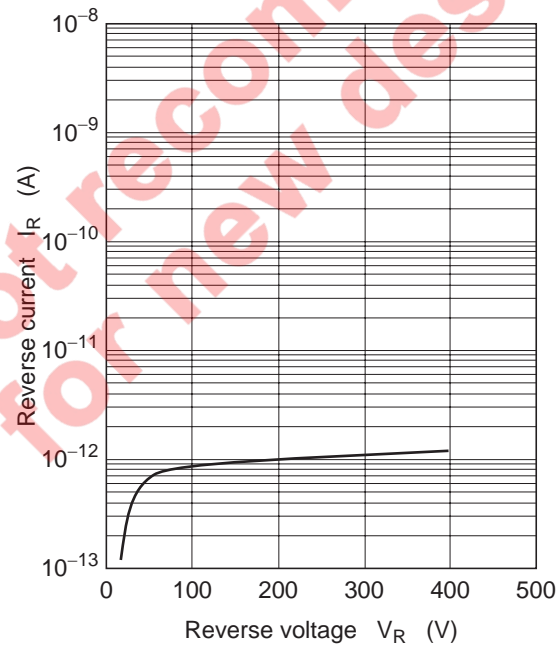
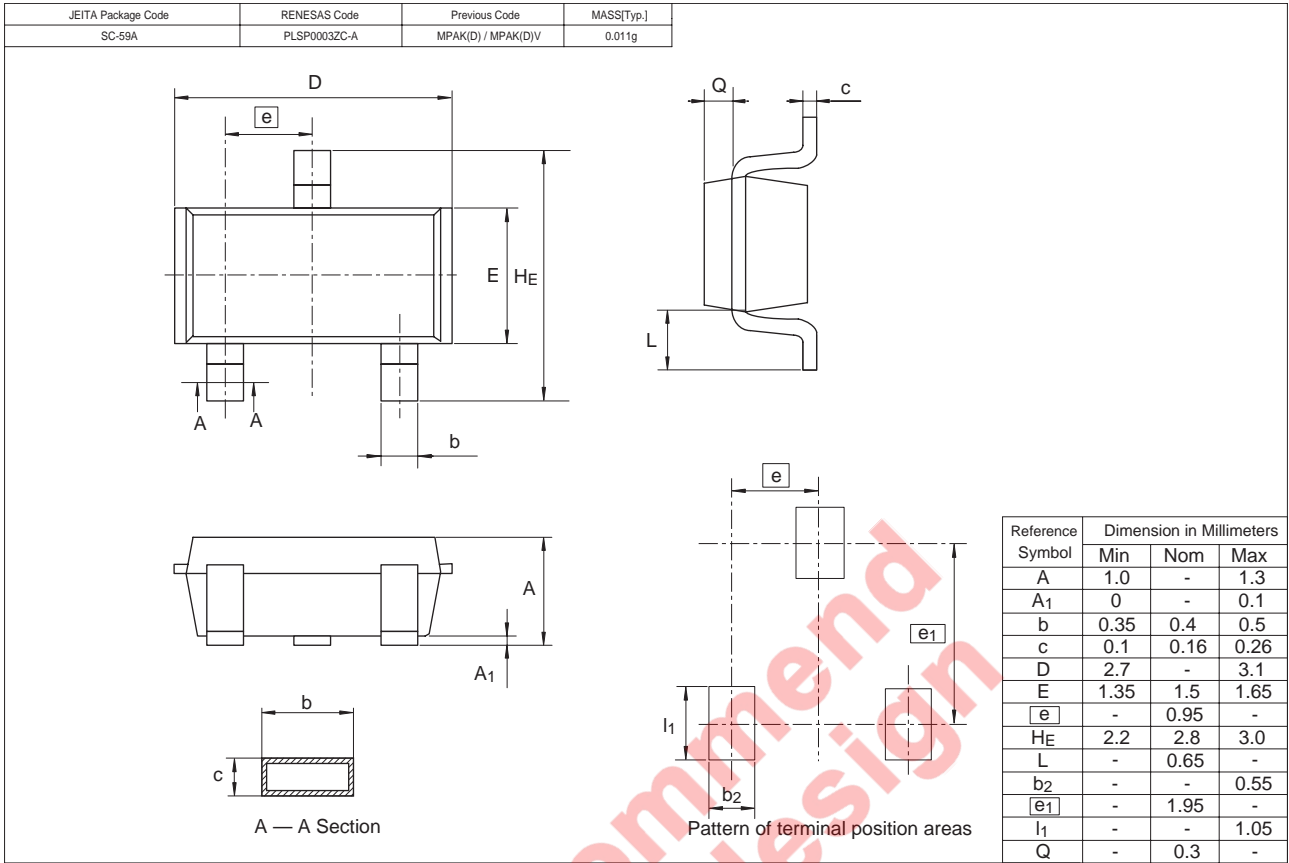


Fig.2 Reverse current vs. Reverse voltage

Package Dimensions



Not recommended for new design

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