

# HSM83

## Silicon Epitaxial Planar Diode for High Voltage Switching

REJ03G0172-0600

Rev.6.00

Dec 15, 2008

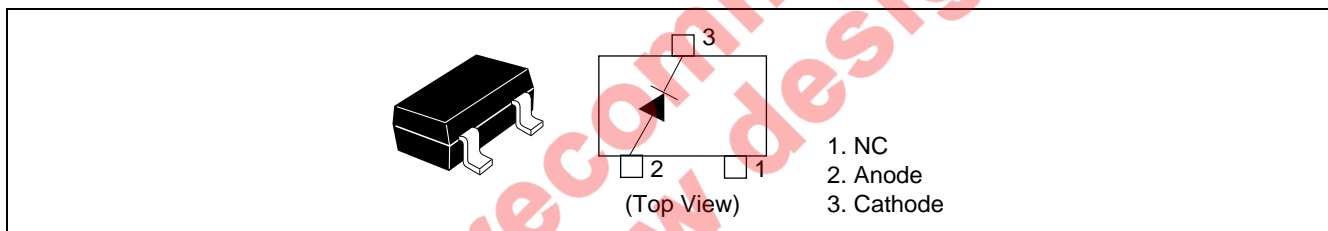
### Features

- High reverse voltage. ( $V_R = 250V$ )
- MPAK package is suitable for high density surface mounting and high speed assembly.

### Ordering Information

Part No	Laser Mark	Package Name	Package Code	Taping Abbreviation (Quantity)
HSM83TL	F7	MPAK	PLSP0003ZC-A	TL (3,000 pcs / reel)
HSM83TR	F7	MPAK	PLSP0003ZC-A	TR (3,000 pcs / reel)

### Pin Arrangement



## 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	$I_R$	—	—	0.2	$\mu\text{A}$	$V_R = 250 \text{ V}$
	$I_R$	—	—	100	$\mu\text{A}$	$V_R = 300 \text{ V}$
Capacitance	C	—	1.5	3.0	pF	$V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$
Reverse recovery time	$t_{rr}$	—	—	100	ns	$I_F = I_R = 30 \text{ mA}$ , $I_{rr} = 3 \text{ mA}$ , $R_L = 100 \Omega$

Not recommended  
for new designs

Main Characteristics

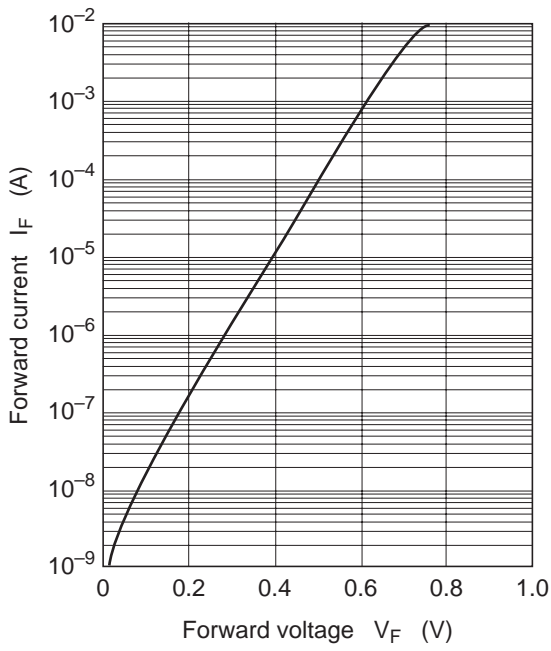


Fig.1 Forward current vs. Forward voltage

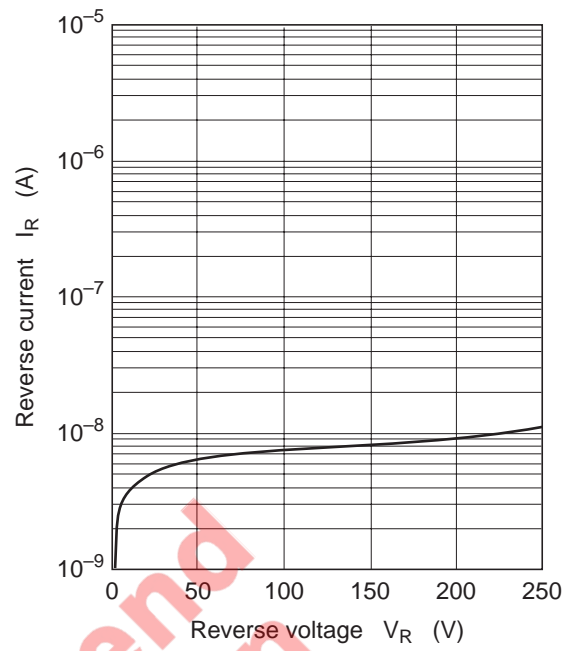


Fig.2 Reverse current vs. Reverse voltage

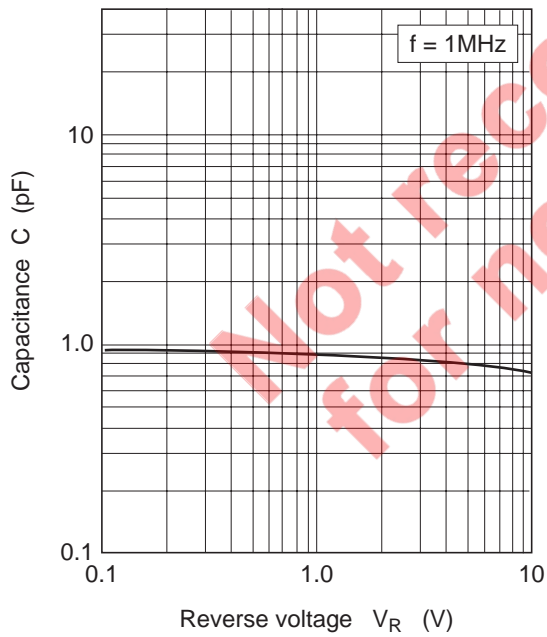
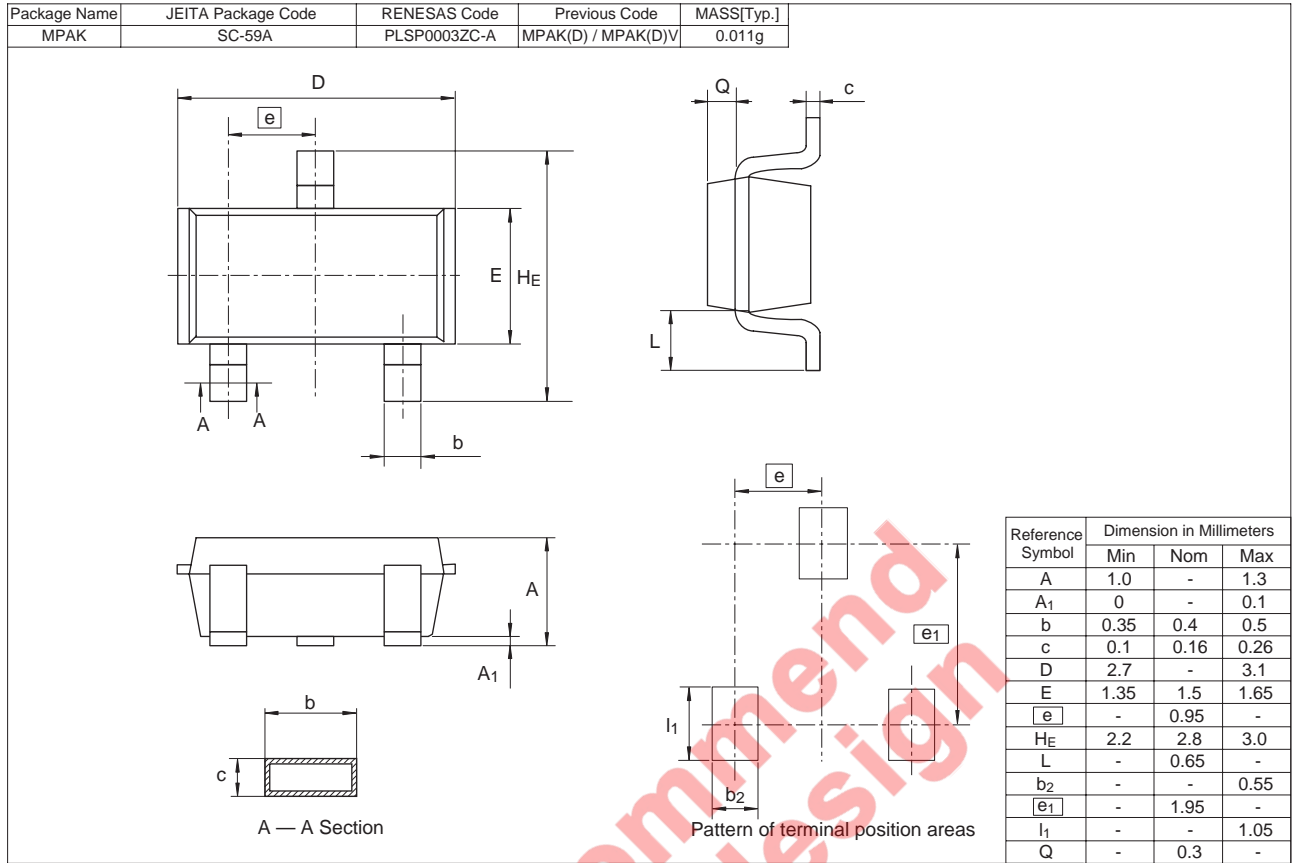


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions



Not recommended for new design

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