

# HSM83

## Silicon Epitaxial Planar Diode for High Voltage Switching

REJ03G0172-0600

Rev.6.00

Dec 15, 2008

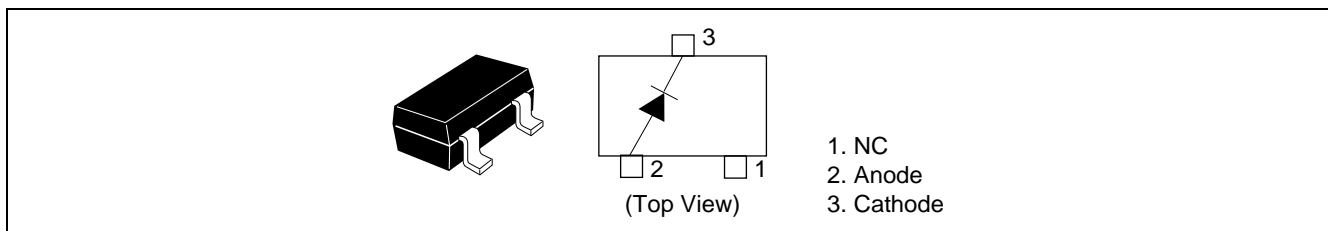
### Features

- 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	$I_F = I_R = 30 \text{ mA}, I_{rr} = 3 \text{ mA}, R_L = 100 \Omega$

Main Characteristics

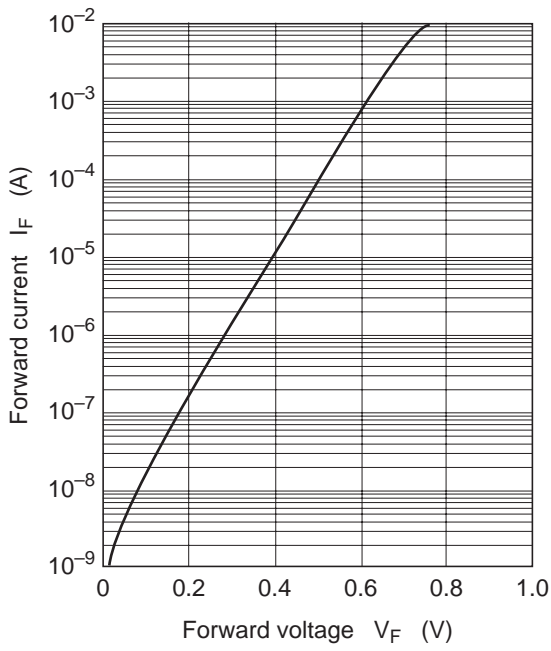


Fig.1 Forward current vs. Forward voltage

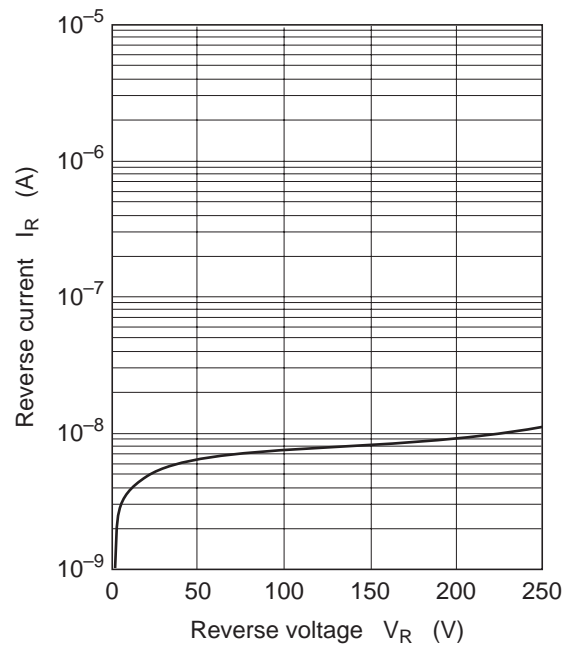


Fig.2 Reverse current vs. Reverse voltage

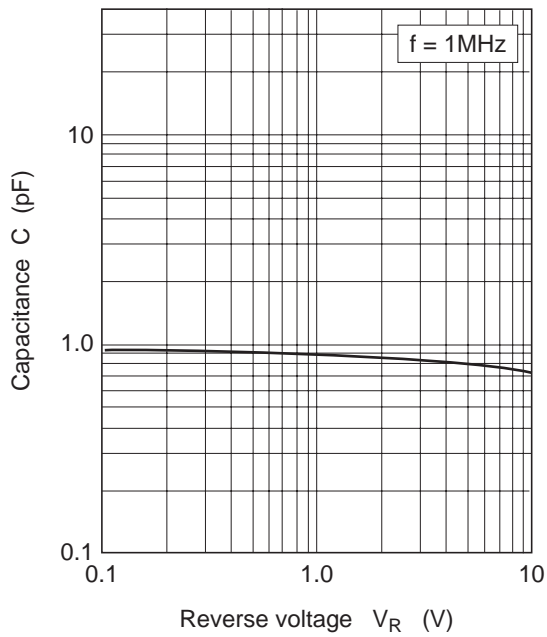
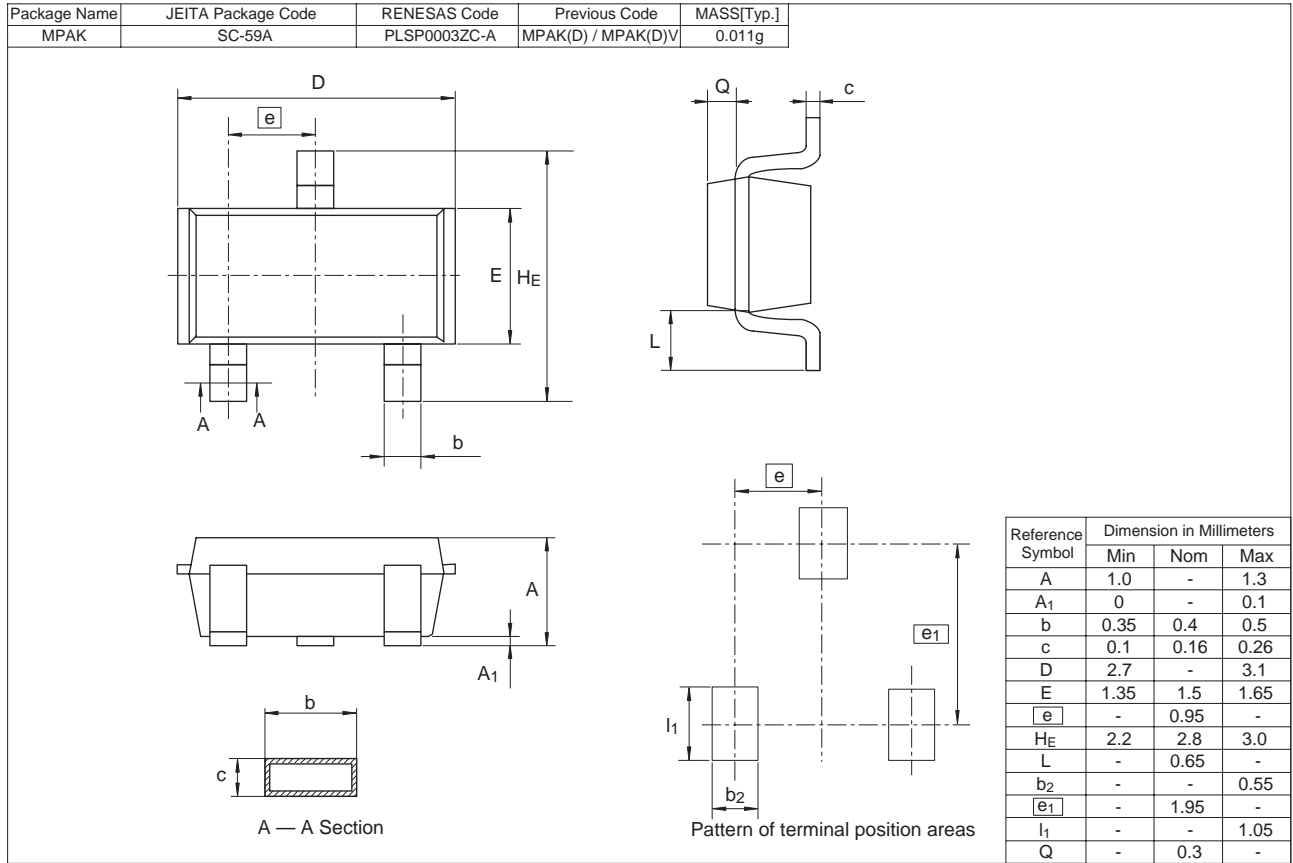


Fig.3 Capacitance vs. Reverse voltage

### Package Dimensions



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