

# HSM2838C

## Silicon Epitaxial Planar Diode for High Speed Switching

REJ03G0555-0500

Rev.5.00

Dec 12, 2008

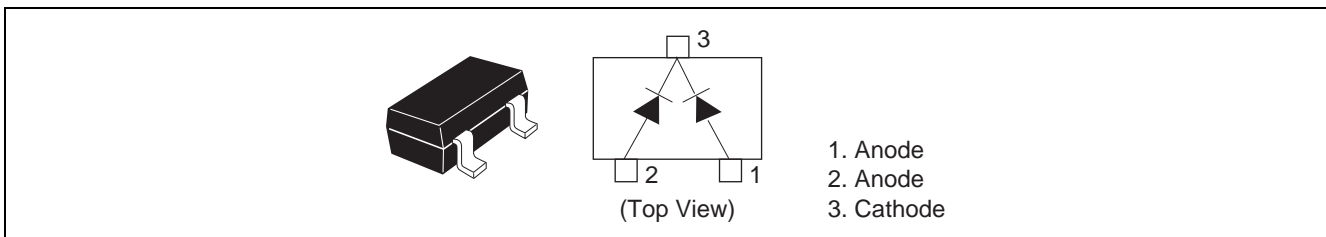
### Features

- Fast recovery time. ( $t_{rr} = 3.0\text{ns}$  max)
- 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)
HSM2838CTL	A6	MPAK	PLSP0003ZC-A	TL (3,000 pcs / reel)
HSM2838CTR	A6	MPAK	PLSP0003ZC-A	TR (3,000 pcs / reel)

### Pin Arrangement



## Absolute Maximum Ratings \*1

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	$V_{RM}$	85	V
Reverse voltage	$V_R$	80	V
Peak forward current	$I_{FM}$	300	mA
Non-Repetitive peak forward surge current	$I_{FSM}^{*2}$	4	A
Average rectified current	$I_o$	100	mA
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

Notes: 1. Per one device.

2. Within 1  $\mu$ s forward surge current.

## Electrical Characteristics \*1

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	—	0.76	1.0	V	$I_F = 10$ mA
	$V_F$	—	0.88	1.0	V	$I_F = 50$ mA
	$V_F$	—	0.97	1.2	V	$I_F = 100$ mA
Reverse current	$I_R$	—	—	0.1	$\mu$ A	$V_R = 80$ V
Capacitance	C	—	0.5	2.0	pF	$V_R = 0$ V, $f = 1$ MHz
Reverse recovery time	$t_{rr}$	—	—	3.0	ns	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 50$ $\Omega$

Note: 1. Per one device.

Main Characteristics

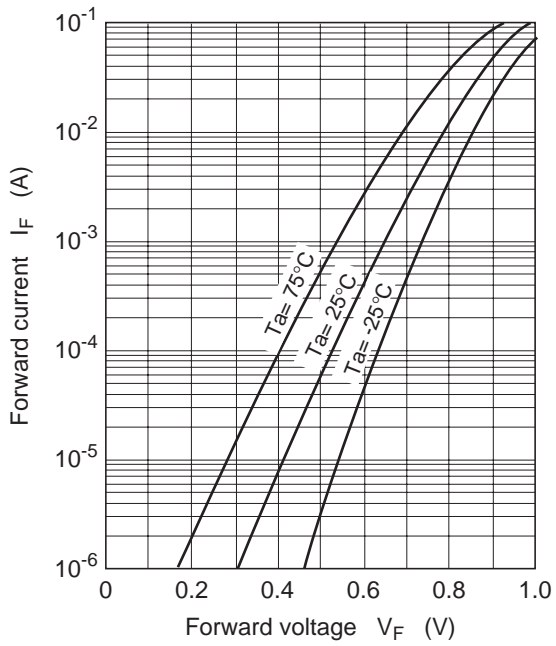


Fig.1 Forward current vs. Forward voltage

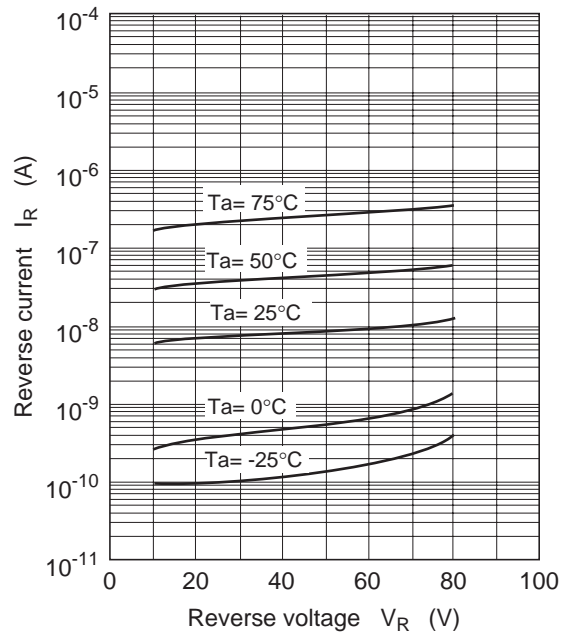


Fig.2 Reverse current vs. Reverse voltage

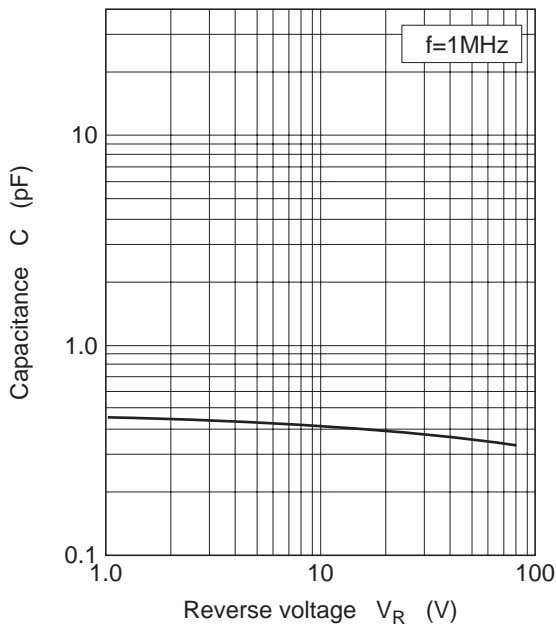
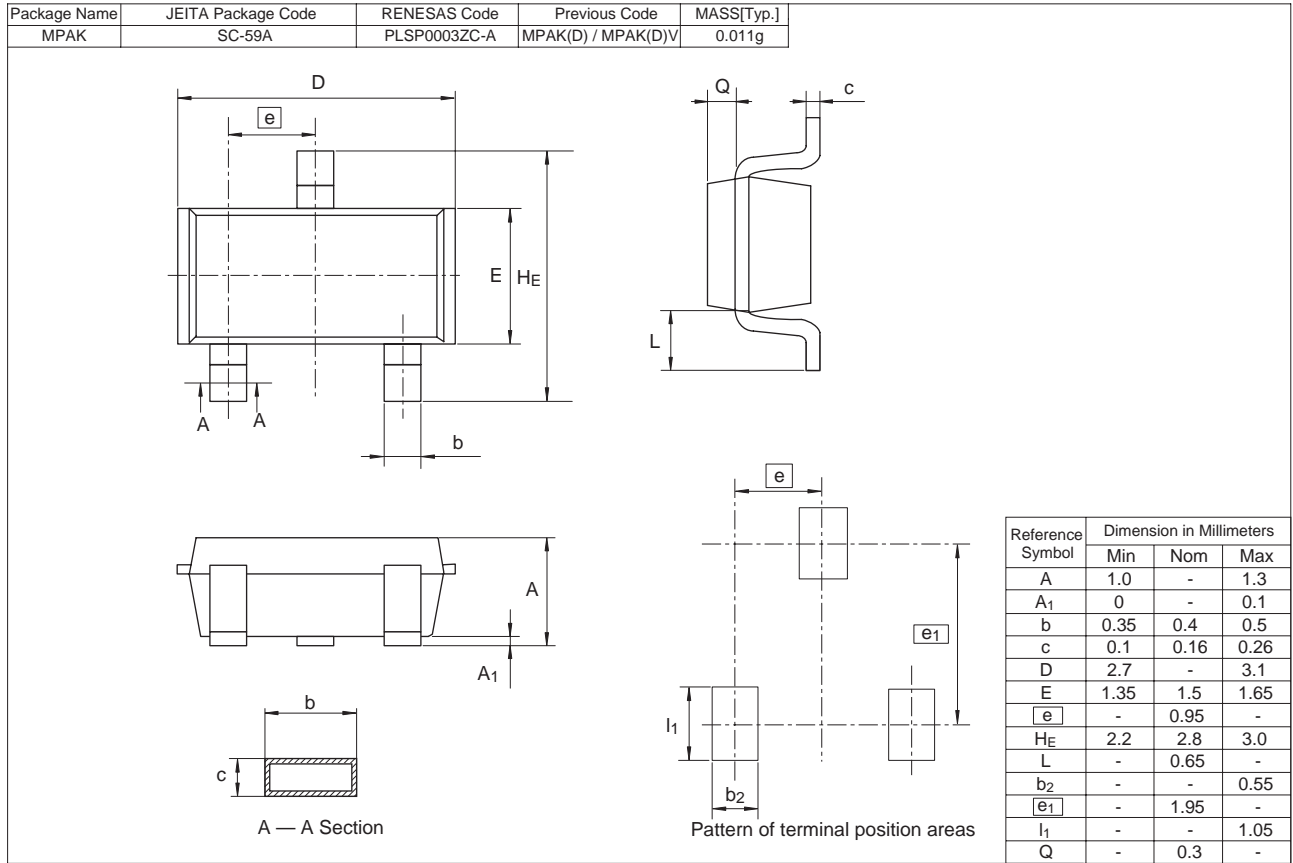


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions



Notes:

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