

# **HSM2838C**

# Silicon Epitaxial Planar Diode for High Speed Switching

REJ03G0555-0500 Rev.5.00 Dec 12, 2008

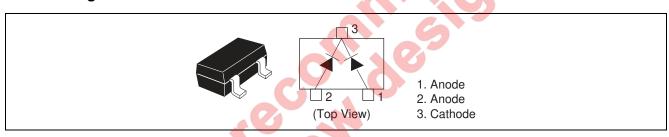
### **Features**

- Fast recovery time. (trr = 3.0ns 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

 $(Ta = 25^{\circ}C)$ 

Item	Symbol	Value	Unit
Peak reverse voltage	V <sub>RM</sub>	85	V
Reverse voltage	$V_R$	80	V
Peak forward current	I <sub>FM</sub>	300	mA
Non-Repetitive peak forward surge current	I <sub>FSM</sub> * <sup>2</sup>	4	Α
Average rectified current	I <sub>0</sub>	100	mA
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

Notes: 1. Per one device.

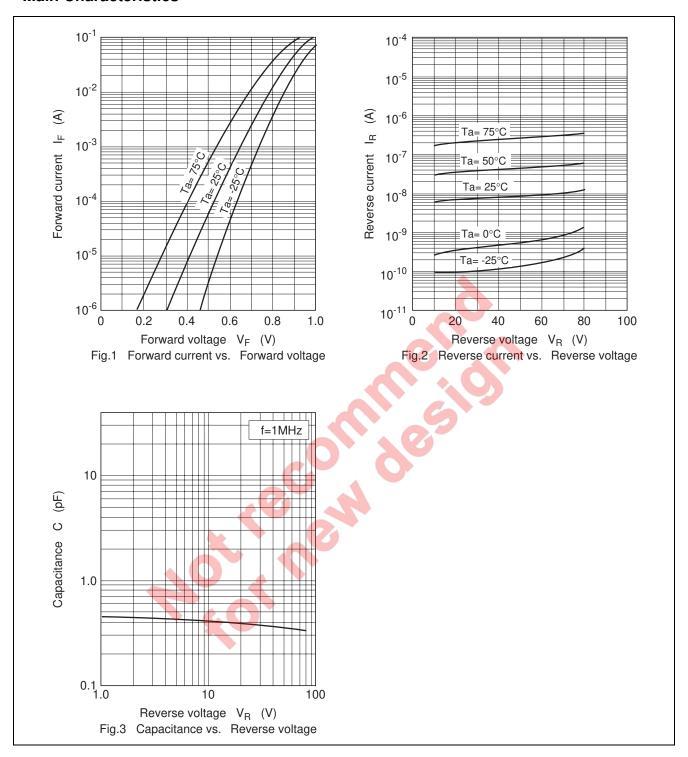
2. Within 1  $\mu$ s forward surge current.

## **Electrical Characteristics \*1**

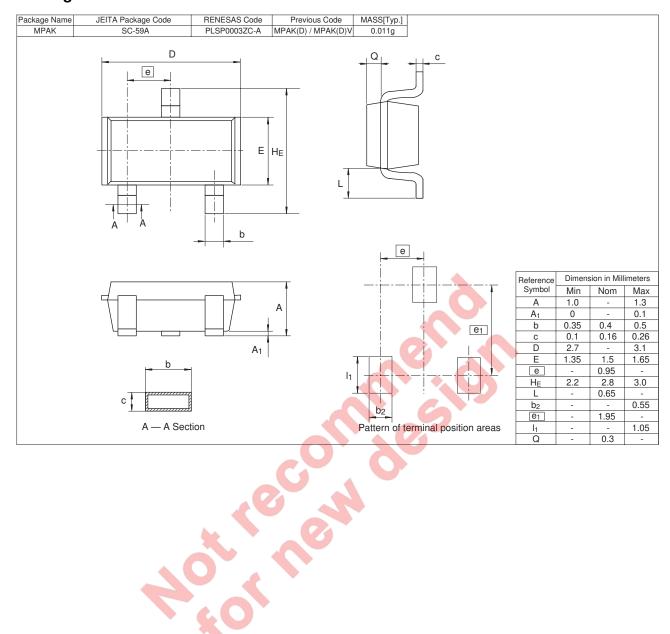
 $(Ta = 25^{\circ}C)$ 

Item	Symbol	Min	Тур	Max	Unit	Test Condition		
Forward voltage	$V_{F}$	_	0.76	1.0	V	I <sub>F</sub> = 10 mA		
	V <sub>F</sub>	_	0.88	1.0	V	I <sub>F</sub> = 50 mA		
	V <sub>F</sub>	_	0.97	1.2	V	I <sub>F</sub> = 100 mA		
Reverse current	I <sub>R</sub>	_	_	0.1	μА	V <sub>R</sub> =80 V		
Capacitance	С	_	0.5	2.0	pF	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$		
Reverse recovery time	t <sub>rr</sub>	_	-	3.0	ns	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 50$ $\Omega$		

### **Main Characteristics**



### **Package Dimensions**



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