

# **HSM109WK**

Silicon Schottky Barrier Diode for Battery Switch

**HITACHI**

ADE-208-059C(Z)  
Rev 3  
September 1996

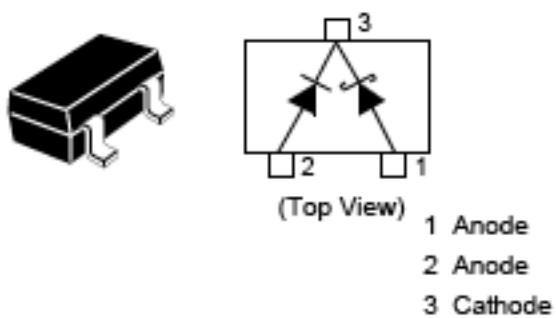
## **Features**

- The HSM109WK has two different (VF- IF) chips, and can change the main battery to the backup battery automatically.
- MPAK package is suitable for high density surface mounting and high speed assembly.

## **Ordering Information**

Type No.	Laser Mark	Package Code
HSM109WK	S7	MPAK

## **Outline**



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## HSM109WK

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### Absolute Maximum Ratings ( $T_a = 25^\circ C$ )

Item	Symbol	Value (Pin1-3)	Value (Pin2-3)	Unit
Peak reverse voltage	VRM	10	10	V
Forward current	IF	30	30	mA
Junction temperature	T <sub>j</sub>	125	125	°C
Storage temperature	T <sub>stg</sub>	-55~+125	-55~+125	°C

### Electrical Characteristics ( $T_a = 25^\circ C$ )

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	VF	Pin 1-3	0.1	~	0.3	V
		Pin 2-3	0.5	~	0.8	
Reverse current	IR	Pin 1-3	~	~	5.0	μA
		Pin 2-3	~	~	0.1	VR = 5V
ESD-Capability	~	225	~	~	V	C=200pF , RL=100Ω , Both forward and reverse direction 5 pulse.

### Main Characteristic

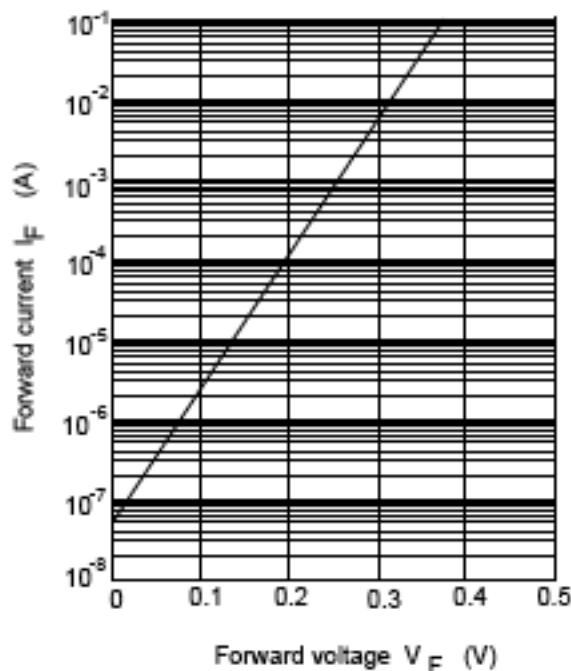


Fig.1 Forward current Vs. Forward voltage  
(Pin 1 - 3)

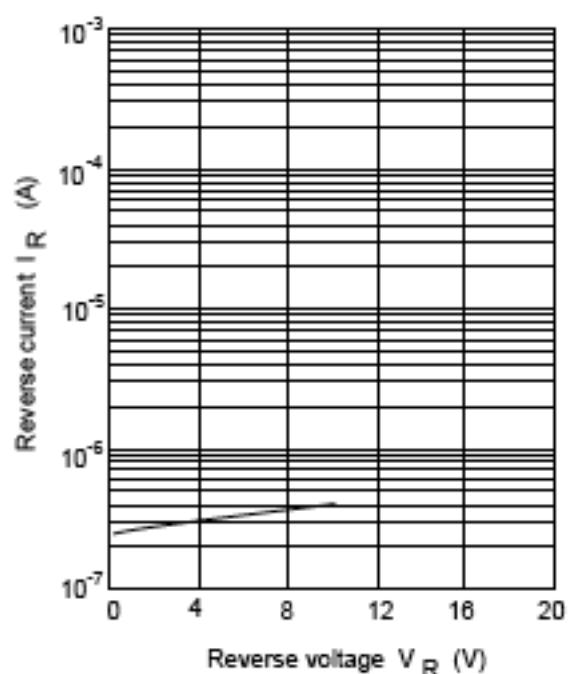


Fig.2 Reverse current Vs. Reverse voltage  
(Pin 1 - 3)

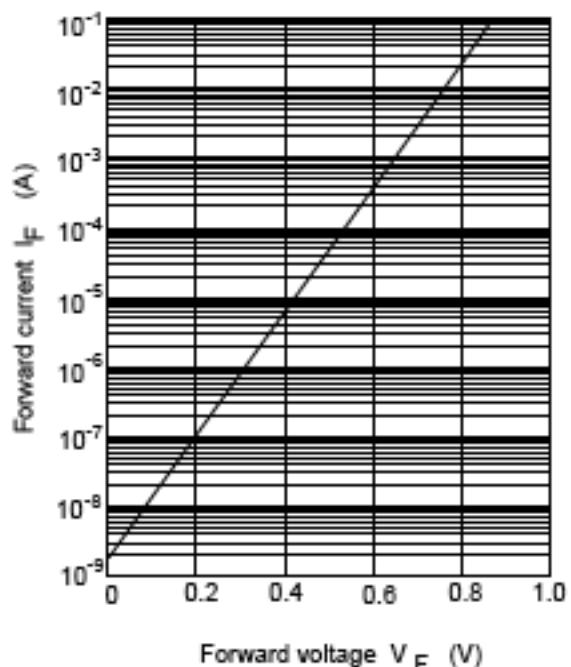


Fig.3 Forward current Vs. Forward voltage  
(Pin 2 - 3)

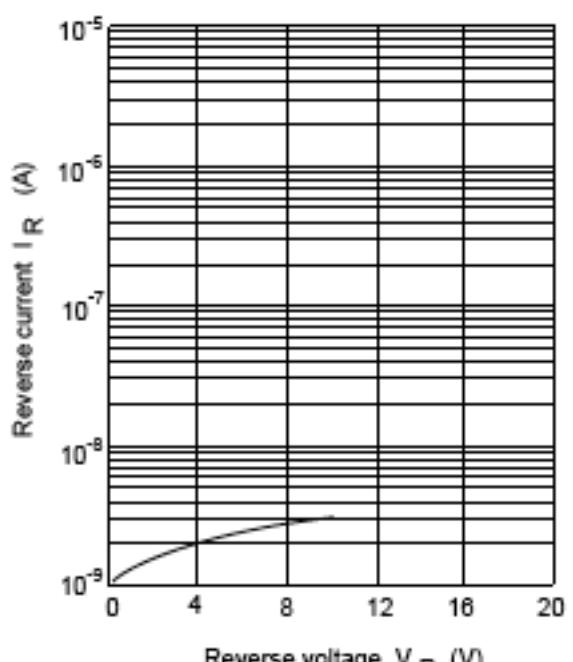


Fig.4 Reverse current Vs. Reverse voltage  
(Pin 2 - 3)

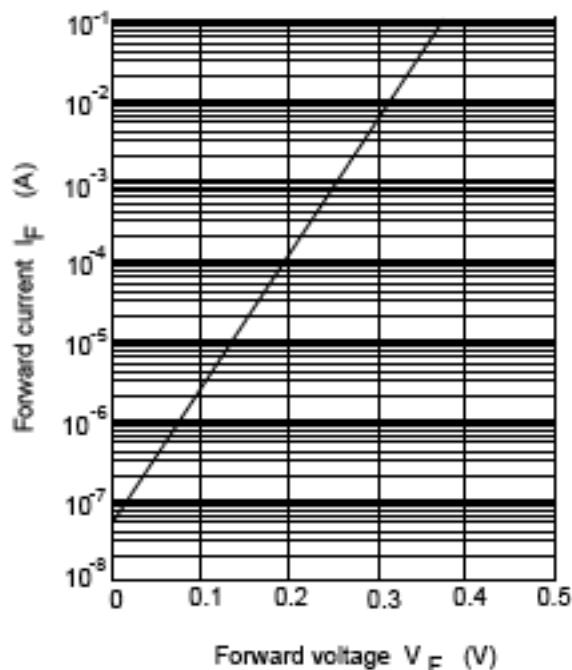
**Main Characteristic**

Fig.1 Forward current Vs. Forward voltage  
(Pin 1 - 3)

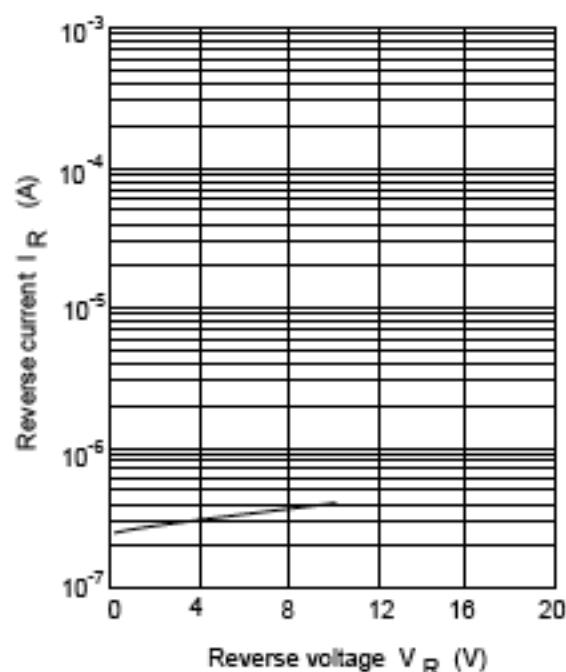


Fig.2 Reverse current Vs. Reverse voltage  
(Pin 1 - 3)

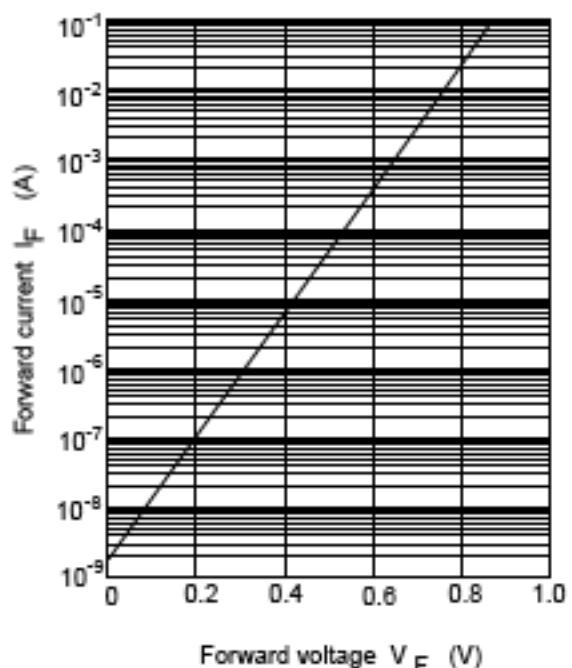


Fig.3 Forward current Vs. Forward voltage  
(Pin 2 - 3)

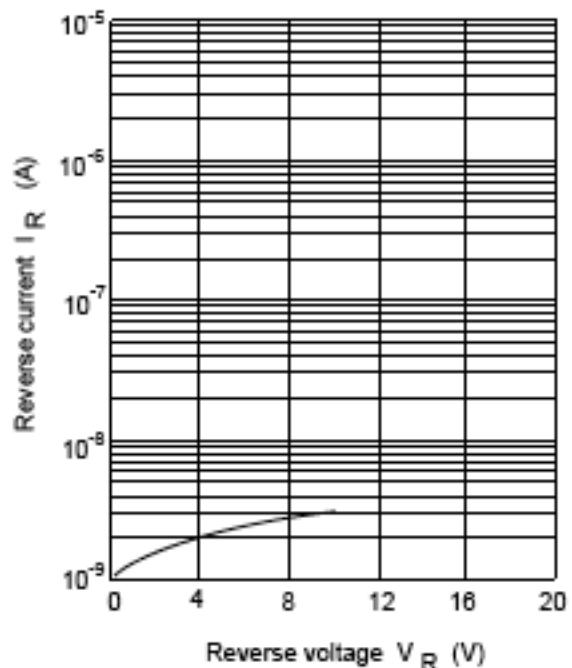


Fig.4 Reverse current Vs. Reverse voltage  
(Pin 2 - 3)