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# HSM109WK

Silicon Schottky Barrier Diode for Battery Switch

# HITACHI

ADE-208-059C(Z)  
Rev 3

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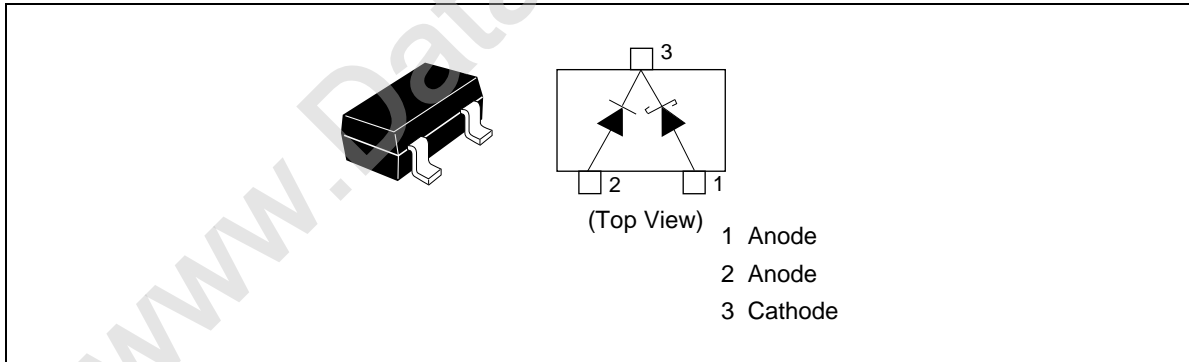
## Features

- The HSM109WK has two different ( $V_F$ -  $I_F$ ) 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 (Ta = 25°C)

Item	Symbol	Value (Pin1-3)	Value (Pin2-3)	Unit
Peak reverse voltage	$V_{RM}$	10	10	V
Forward current	$I_F$	30	30	mA
Junction temperature	$T_J$	125	125	°C
Storage temperature	$T_{stg}$	-55 to +125	-55 to +125	°C

### Electrical Characteristics (Ta = 25°C)

Item	Symbol		Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	Pin 1-3	0.1	—	0.3	V	$I_F = 1 \text{ mA}$
		Pin 2-3	0.5	—	0.8		
Reverse current	$I_R$	Pin 1-3	—	—	5.0	$\mu\text{A}$	$V_R = 5\text{V}$
		Pin 2-3	—	—	0.1		
ESD-Capability	—		225	—	—	V	C = 200pF , RL = 100Ω , Both forward and reverse direction 5 pulse.

Main Characteristic

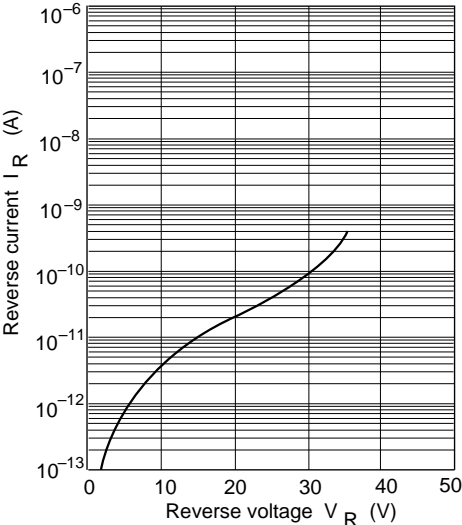


Fig.1 Reverse current Vs. Reverse voltage

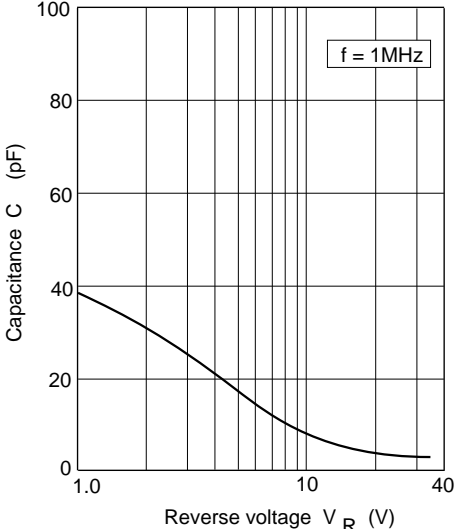


Fig.2 Capacitance Vs. Reverse voltage

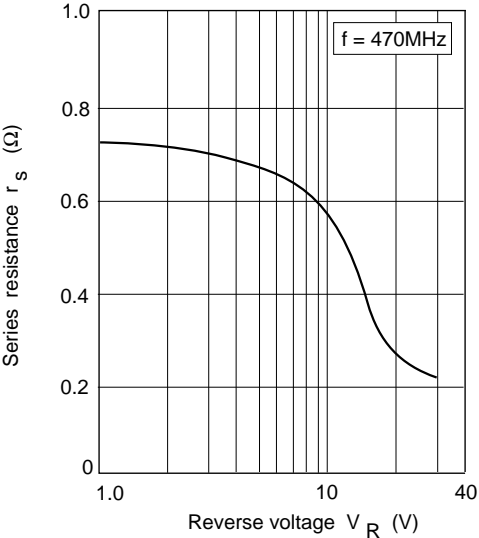


Fig.3 Series resistance Vs. Reverse voltage

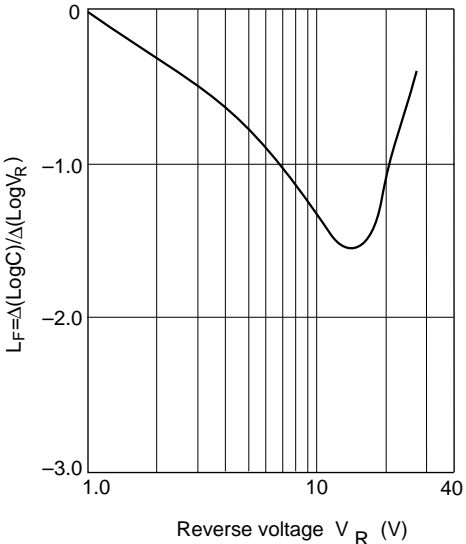


Fig.4 Linearity factor Vs. Reverse voltage

# HSM109WK

## Package Dimensions

Unit : mm

