
HSM113WK

Silicon Schottky Barrier Diode for Battery Switch

HITACHI

ADE-208-025B (Z)
Rev. 2

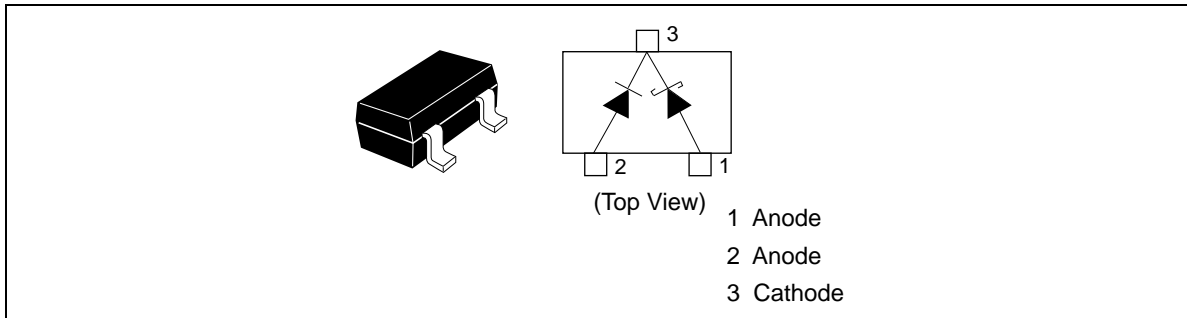
Features

- The HSM113WK 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
HSM113WK	S12	MPAK

Pin Arrangement



HSM113WK

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value Pin 1-3	Value Pin 2-3	Unit
Peak reverse voltage	V_{RM}	20	20	V
Forward current	I_F	200	100	mA
Non-Repetitive peak forward surge current	I_{FSM}^*	2	0.6	A
Junction temperature	Tj	125	125	°C
Storage temperature	Tstg	-55 to +125	-55 to +125	°C

Note: 10msec, 1 pulse square wave

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition	
Forward voltage	V_{F1}	Pin 1-3	—	—	0.35	V	$I_F = 10mA$
		Pin 2-3	1.2	—	1.8		
Forward voltage	V_{F2}	Pin 1-3	—	—	0.55	V	$I_F = 200mA$
		Pin 2-3	—	—	3.0		$I_F = 100mA$
Reverse current	I_R	Pin 1-3	—	—	10	μA	$V_R = 5V$
		Pin 2-3	—	—	1.0		$V_R = 20V$
ESD-Capability	—	225	—	—	V	C = 200pF , RL = 100 Ω , Both forward and reverse direction 1 pulse.	

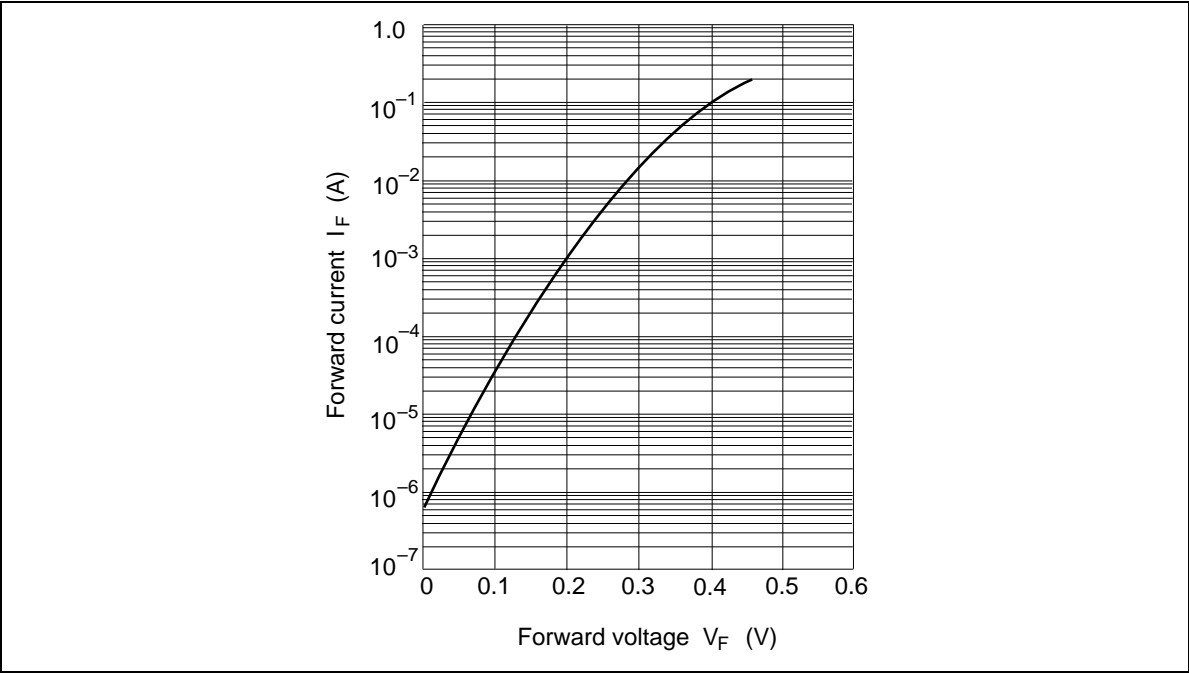


Fig.1 Forward current Vs. Forward voltage (Pin1-3)

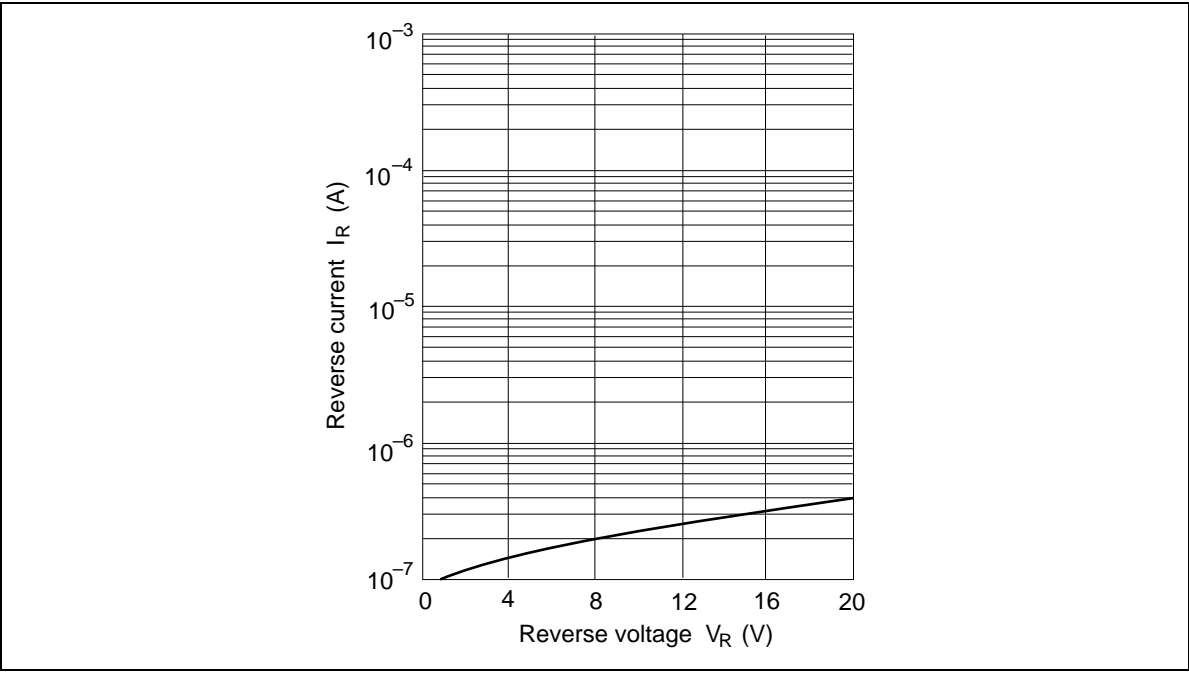


Fig.2 Reverse current Vs. Reverse voltage (Pin1-3)

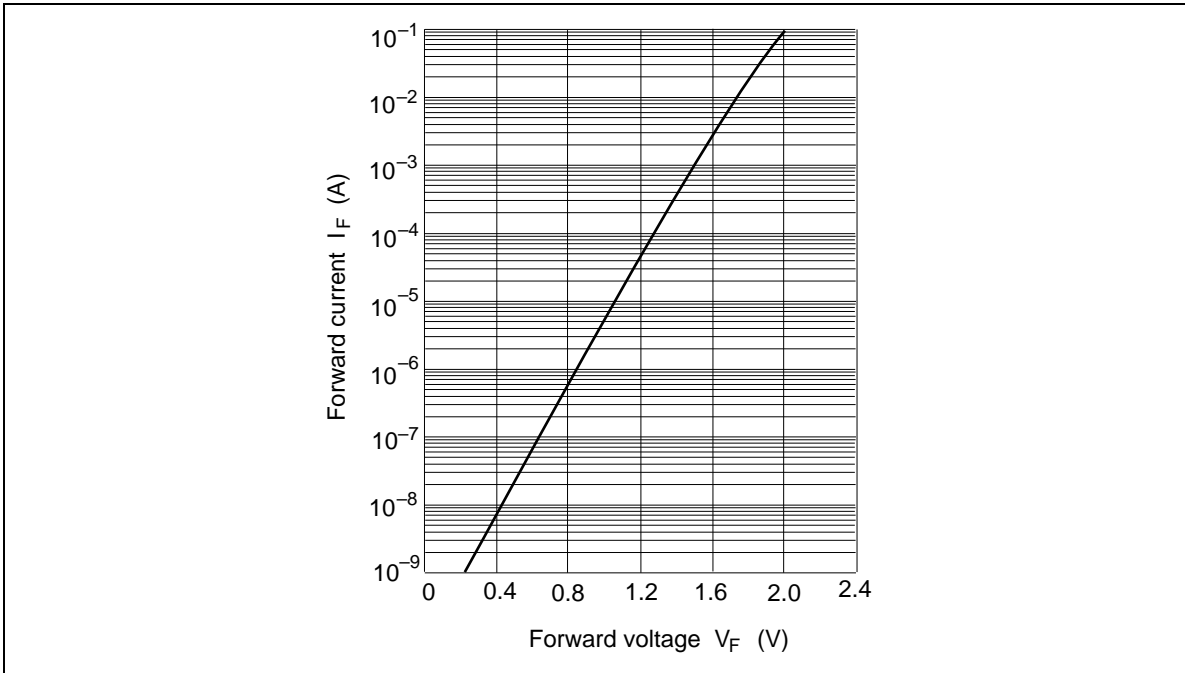


Fig.3 Forward current Vs. Forward voltage (Pin2-3)

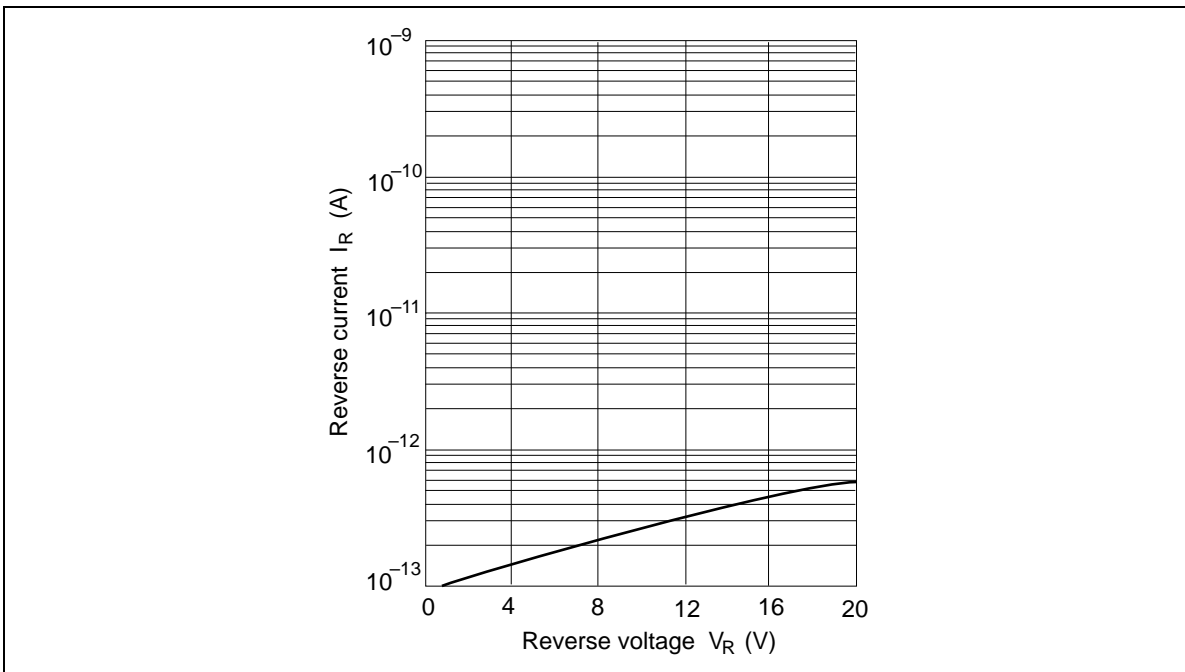


Fig.4 Reverse current Vs. Reverse voltage (Pin2-3)

Package Dimensions

