

HSM113WK

Silicon Schottky Barrier Diode for Battery Switch

HITACHI

Preliminary
Rev.1
Apr. 1993

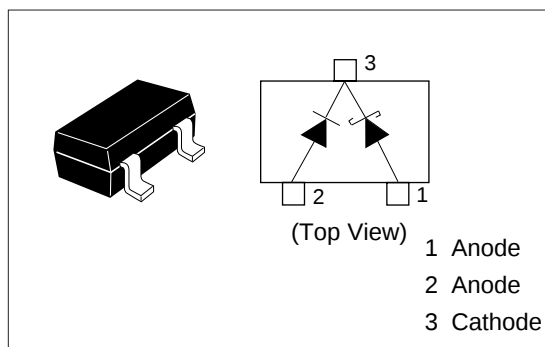
Features

- 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



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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	T_j	125	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	-55 to +125	$^\circ\text{C}$

* 10msec, 1 pulse square wave

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	Pin 1-3	—	0.35	V	$I_F = 10\text{mA}$
		Pin 2-3	1.2	1.8		
Forward voltage	V_{F2}	Pin 1-3	—	0.55	V	$I_F = 200\text{mA}$
		Pin 2-3	—	3.0		$I_F = 100\text{mA}$
Reverse current	I_R	Pin 1-3	—	10	μA	$V_R = 5\text{V}$
		Pin 2-3	—	1.0		$V_R = 20\text{V}$

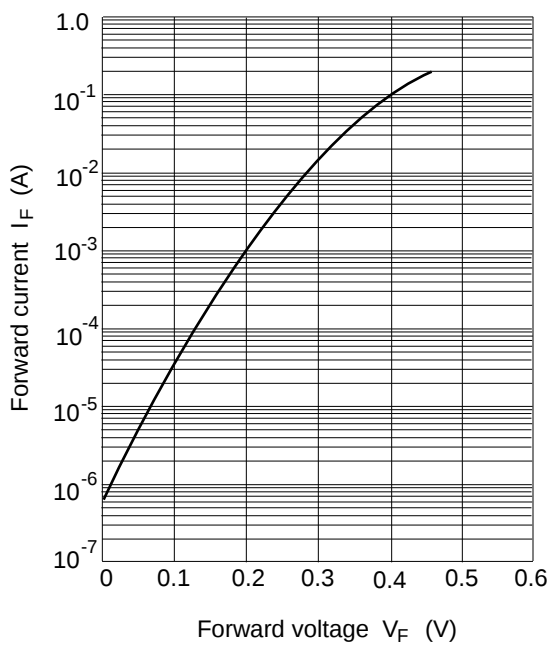


Fig.1 Forward current Vs. Forward voltage (Pin1-3)

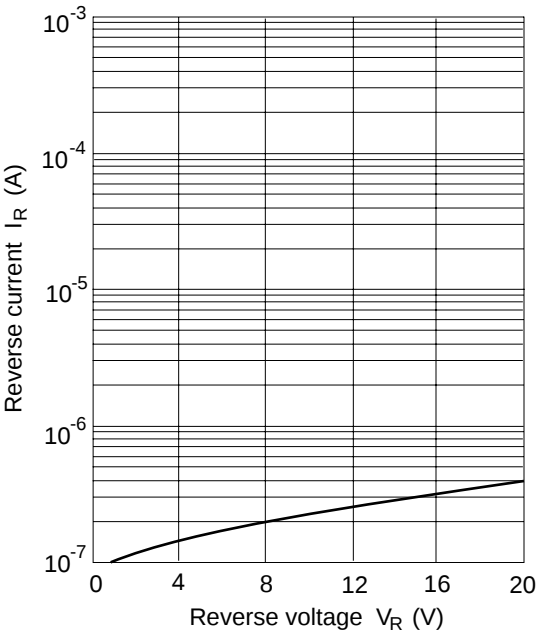


Fig.2 Reverse current Vs. Reverse voltage (Pin1-3)

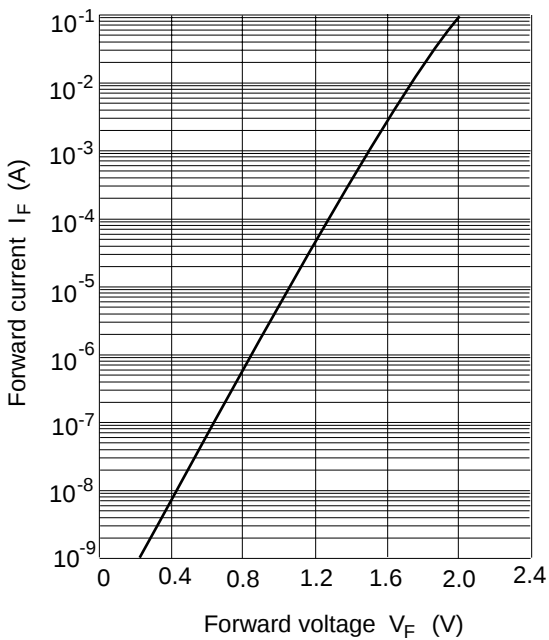


Fig.3 Forward current Vs. Forward voltage (Pin2-3)

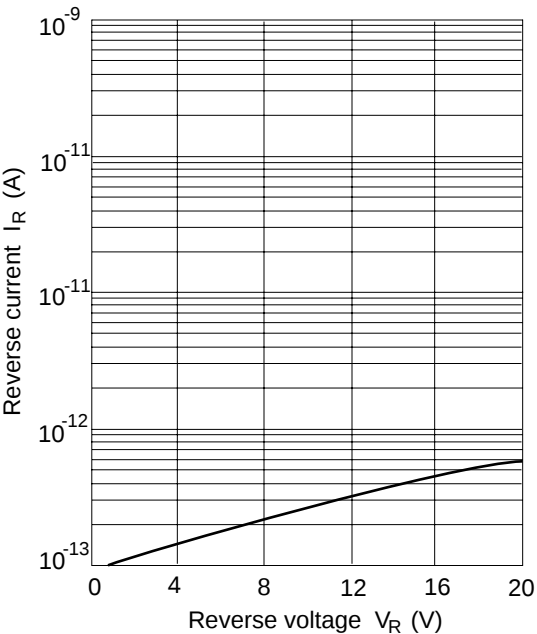


Fig.4 Reverse current Vs. Reverse voltage (Pin2-3)

Package Dimensions

Unit: mm

