
HSM125WK

Silicon Schottky Barrier Diode for Battery Switch

HITACHI

ADE-208-188 (Z)
Preliminary, Rev. 0
Oct. 1993

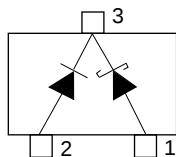
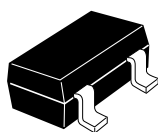
Features

- The HSM125WK 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
HSM125WK	S13	MPAK

Pin Arrangement



(Top View)

- 1 Anode
- 2 Anode
- 3 Cathode

HSM125WK

Absolute Maximum Ratings (Ta = 25°C)

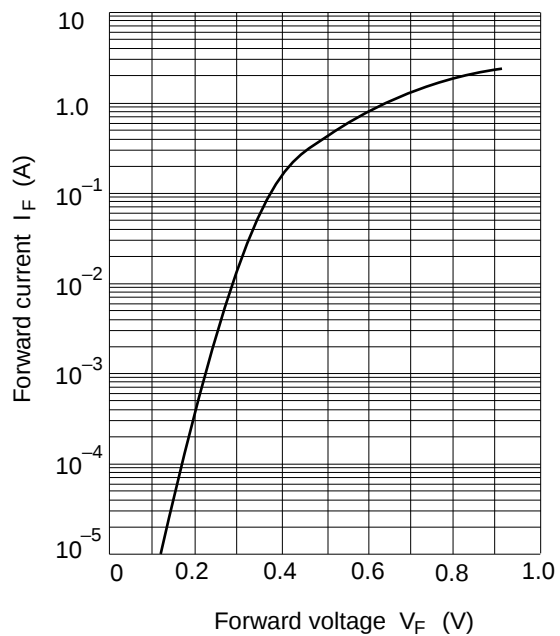
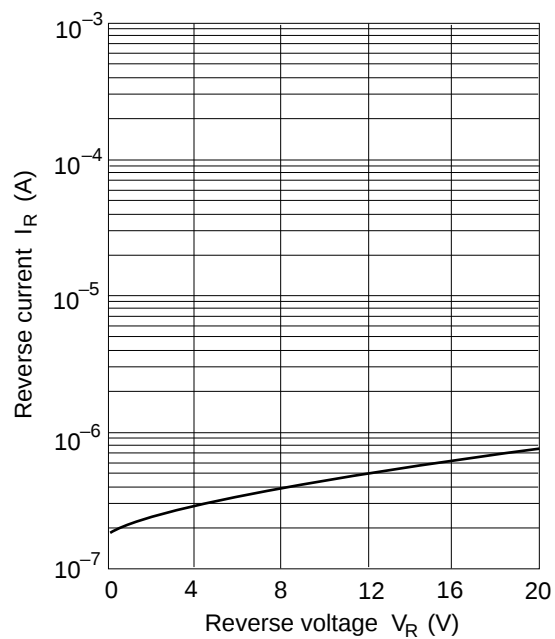
Item	Symbol	Value Pin 1-3	Value Pin 2-3	Unit
Peak reverse voltage	V_{RM}	20	20	V
Forward current	I_F^*	500	100	mA
Junction temperature	Tj	125	125	°C
Storage temperature	Tstg	−55 to +125	−55 to +125	°C

Note: Per one device

Electrical Characteristics (Ta = 25°C)

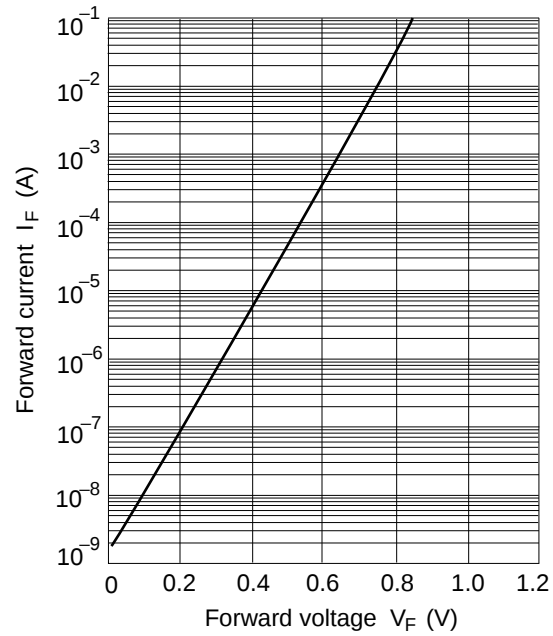
Item	Symbol		Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	Pin 1-3	0.1	—	0.3	V	$I_F = 1\text{mA}$
		Pin 2-3	0.5	—	0.8		
Forward voltage	V_{F2}	Pin 1-3	—	—	0.55	V	$I_F = 500\text{mA}$
		Pin 2-3	—	—	1.2		$I_F = 100\text{mA}$
Reverse current	I_R	Pin 1-3	—	—	30	μA	$V_R = 20\text{V}$
		Pin 2-3	—	—	0.1		
ESD Capability	—		200	—	—	V	*C = 200pF, Both forward and reverse direction 1 pulse

Note: Failure Criterion; Pin 1-3 ($I_R \geq 60\mu\text{A}$ at $V_R = 20\text{V}$), Pin 2-3 ($I_R \geq 0.2\mu\text{A}$ at $V_R = 20\text{V}$)

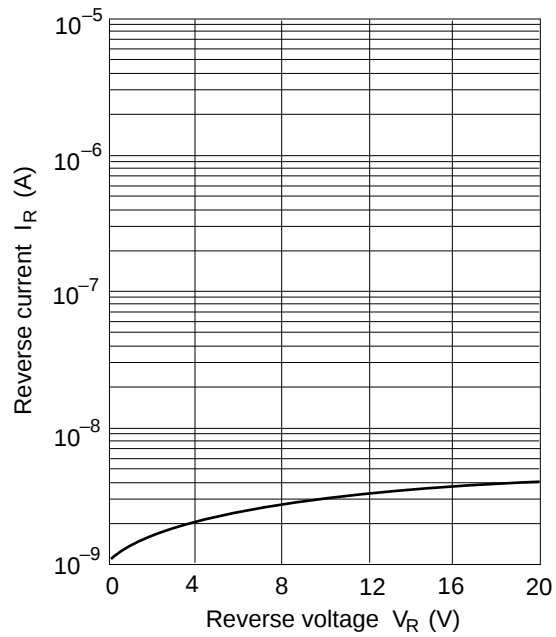
Forward current Vs. Forward voltage (Pin 1-3)**Reverse current Vs. Reverse voltage (Pin 1-3)**

HSM125WK

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



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



Package Dimensions

