# **HSM88WK**

Silicon Schottky Barrier Diode for Balanced Mixer

# HITACHI

ADE-208-0489F (Z) Rev 6 Jul 1998

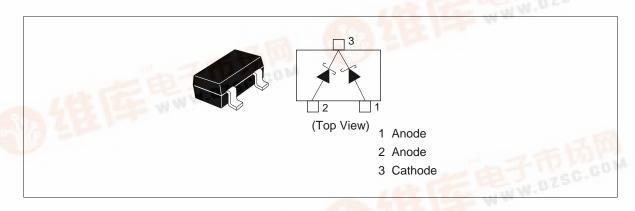
#### **Features**

- Proof against high voltage.
- MPAK package is suitable for high density surface mounting and high speed assembly.

#### **Ordering Information**

Type No.	Laser Mark	Package Code
HSM88WK	C4	MPAK

#### **Outline**





# HSM88WK

### Absolute Maximum Ratings ( $Ta = 25^{\circ}C$ )

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	10	V
Average rectified current	I <sub>0</sub> *1	15	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	−55 to +125	°C

Notes 1.Per one device

### Electrical Characteristics (Ta = $25^{\circ}$ C) \*1

Item	Symbol	Min	Тур	Max	Unit	Test Condition
Forward voltage	$V_{F1}$	350	_	420	mV	I <sub>F</sub> = 1 mA
	$V_{F2}$	500	_	580	<del>-</del>	I <sub>F</sub> = 10 mA
Reverse current	I <sub>R1</sub>	_	_	0.2	μΑ	$V_R = 2V$
	I <sub>R2</sub>	_	_	10	_	V <sub>R</sub> = 10V
Capacitance	С	_	_	0.85	pF	V <sub>R</sub> = 0V, f = 1 MHz
Capacitance deviation	ΔC	_	_	0.10	pF	V <sub>R</sub> = 0V, f = 1 MHz
Forward voltage deviation	$\Delta V_{F}$	_	_	10	mV	I <sub>F</sub> = 10 mA
ESD-Capability <sup>*2</sup>	_	30	_	_	V	C=200pF , Both forward and reverse direction 1 pulse.

Notes 1. Per one device

Notes 2. Failure criterion ; IR  $\geq$  400nA at VR =2 V

### **Main Characteristic**

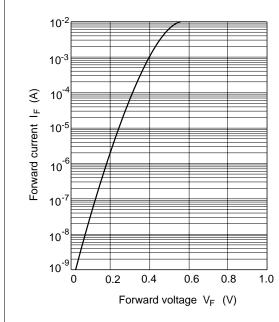


Fig.1 Forward current Vs. Forward voltage

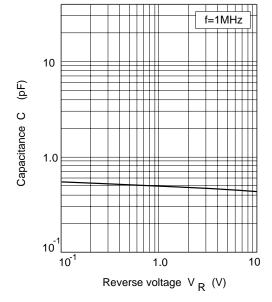


Fig.3 Capacitance Vs. Reverse voltage

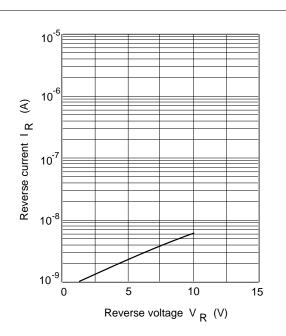
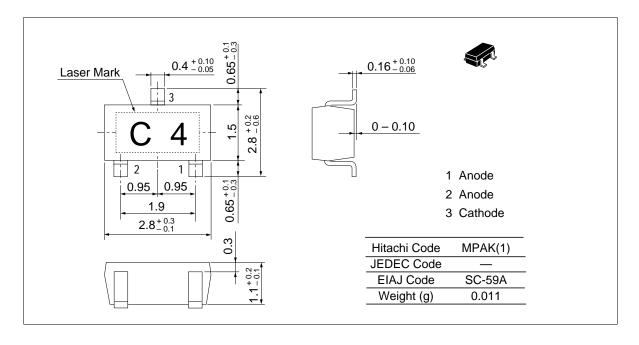


Fig.2 Reverse current Vs. Reverse voltage

# HSM88WK

# **Package Dimensions**

Unit: mm



#### **Cautions**

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