

HSM88AS

Silicon Schottky Barrier Diode for Balanced Mixer

HITACHI

Rev. 4
Jul. 1994

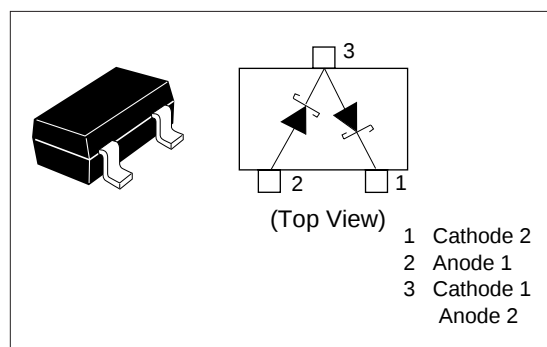
Features

- 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
HSM88AS	C 1	MPAK

Pin Arrangement



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

Item	Symbol	Value	Unit
Reverse voltage	V_R	10	V
Average rectified	I_o^*	15	mA
Junction temperature	T_j	100	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +100	$^\circ\text{C}$
Operation temperature	T_{opr}	-40 to +85	$^\circ\text{C}$

* Per one device

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

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	350	—	420	mV	$I_F = 1 \text{ mA}$
	V_{F2}	500	—	580		$I_F = 10 \text{ mA}$
Reverse current	I_{R1}	—	—	0.2	μA	$V_R = 2 \text{ V}$
	I_{R2}	—	—	10		$V_R = 10 \text{ V}$
Capacitance	C	—	—	0.85	pF	$V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$
Capacitance deviation	ΔC	—	—	0.10	pF	$V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$
Forward voltage deviation	ΔV_F	—	—	10	mV	$I_F = 10 \text{ mA}$
ESD Capability	—	30	—	—	V	** C=200pF, Both forward and reverse direction 1 pulse

* Per one device

** Failure Criterion ; $I_R \geq 400 \text{ nA}$ at $V_R = 2 \text{ V}$

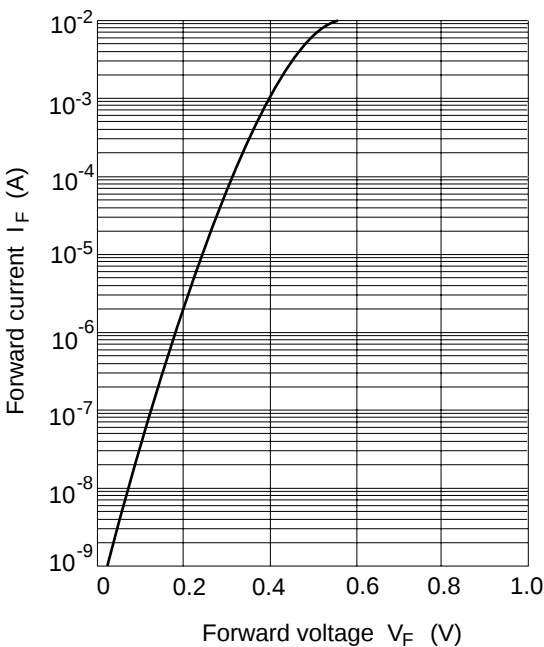


Fig.1 Forward current Vs. Forward voltage

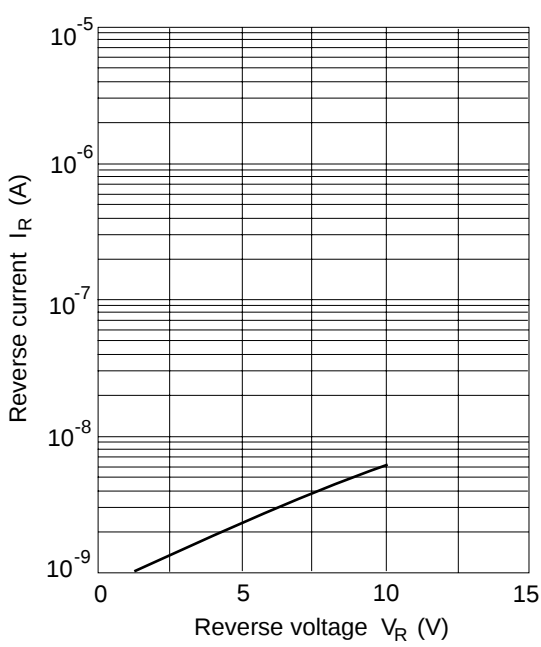


Fig.2 Reverse current Vs. Reverse voltage

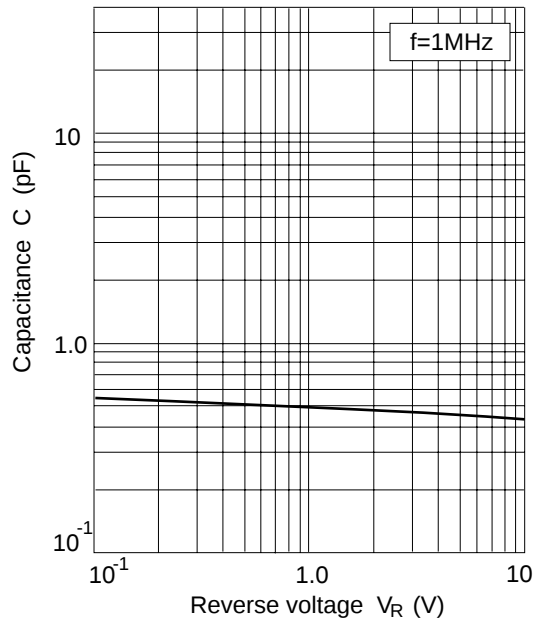


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm

