

HSM88AS

Silicon Schottky Barrier Diode for Balanced Mixer

REJ03G0135-0600Z
(Previous: ADE-208-046E)
Rev.6.00
Nov.06.2003

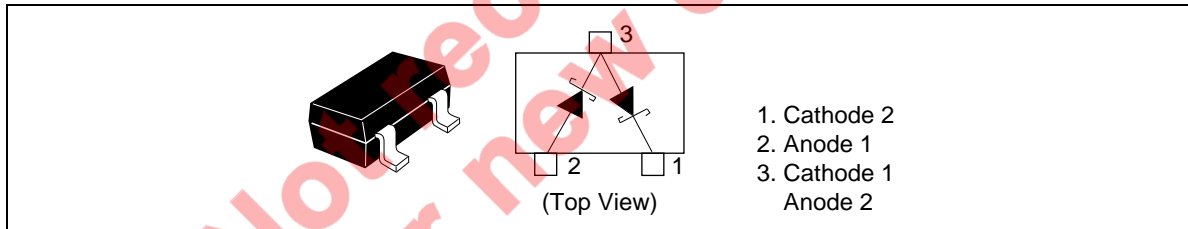
Features

- 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	C1	MPAK

Pin Arrangement



HSM88AS

Absolute Maximum Ratings

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

Item	Symbol	Value	Unit
Reverse voltage	V_R	10	V
Average rectified current	I_O^{*1}	15	mA
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

Note: 1. Per one device

Electrical Characteristics *1

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

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	0.35	—	0.42	V	$I_F = 1\text{ mA}$
	V_{F2}	0.50	—	0.58		$I_F = 10\text{ mA}$
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 *2	—	30	—	—	V	C = 200 pF, R = 0 Ω , Both forward and reverse direction 1 pulse.

Notes: 1. Per one device

2. Failure criterion ; $I_R \geq 0.4\ \mu\text{A}$ at $V_R = 2\text{ V}$

Main Characteristics

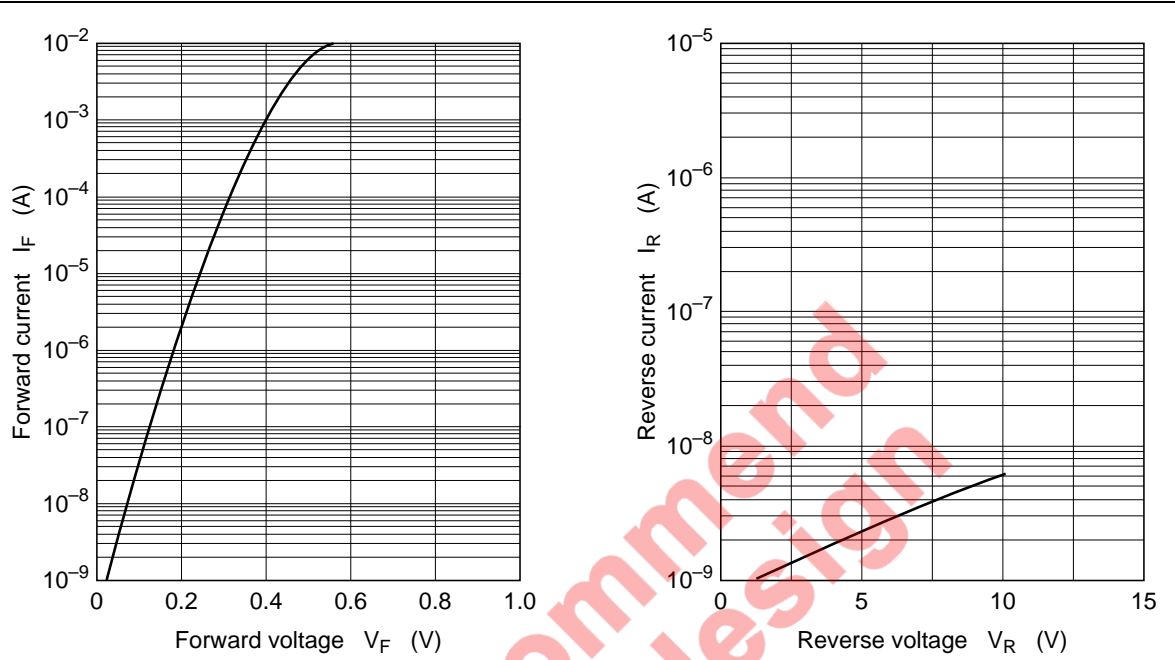


Fig.1 Forward current vs. Forward voltage

Fig.2 Reverse current vs. Reverse voltage

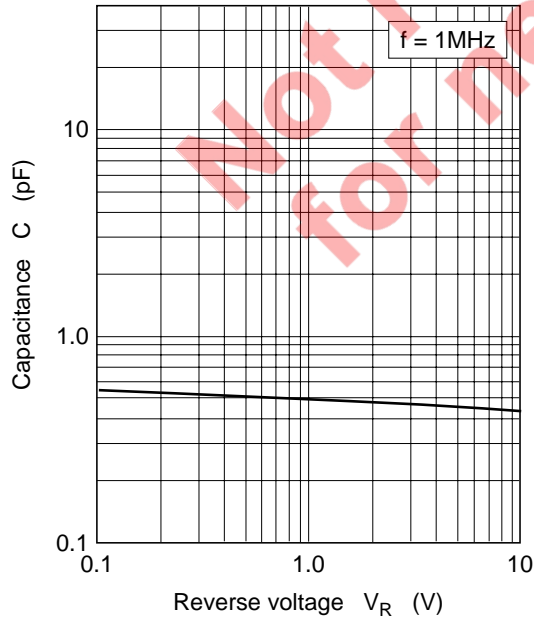
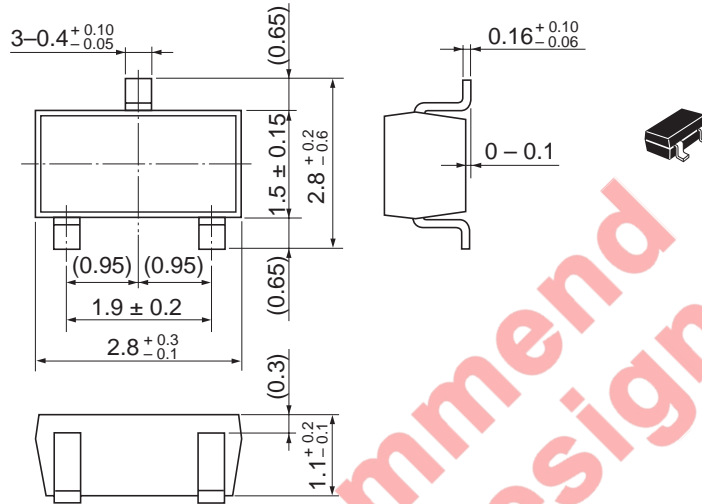


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions

As of January, 2003
Unit: mm



Package Code	MPAK
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.011 g

Not recommend
for new design

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April 1st, 2010
Renesas Electronics Corporation

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Not recommended
for new design

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