

HSM88AS

Silicon Schottky Barrier Diode for Balanced Mixer

HITACHI

ADE-208-046E (Z)

Rev 5

Jul 1998

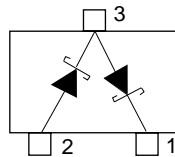
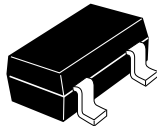
Features

- 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
HSM88AS	C1	MPAK

Outline



(Top View)

- 1 Cathode 2
- 2 Anode 1
- 3 Cathode 1
Anode 2

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	10	V
Average rectified current	I_O^{*1}	15	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

Electrical Characteristics (Ta = 25°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*1	—	30	—	—	V	C=200pF , Both forward and reverse direction 1 pulse.

Notes 1. Failure criterion ; $I_R \geq 400\text{nA}$ at $V_R = 2 \text{ V}$

Main Characteristic

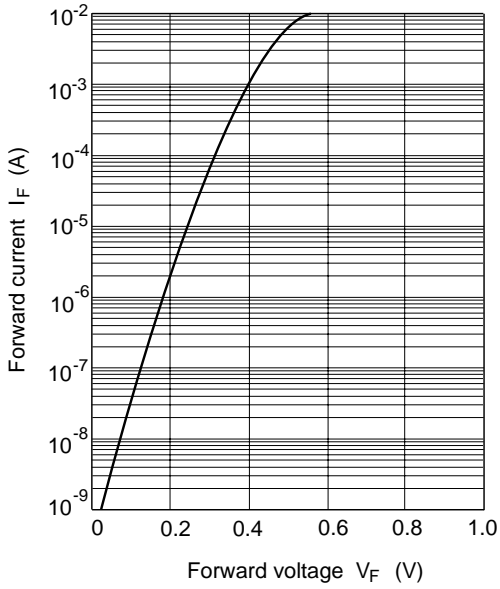


Fig.1 Forward current Vs. Forward voltage

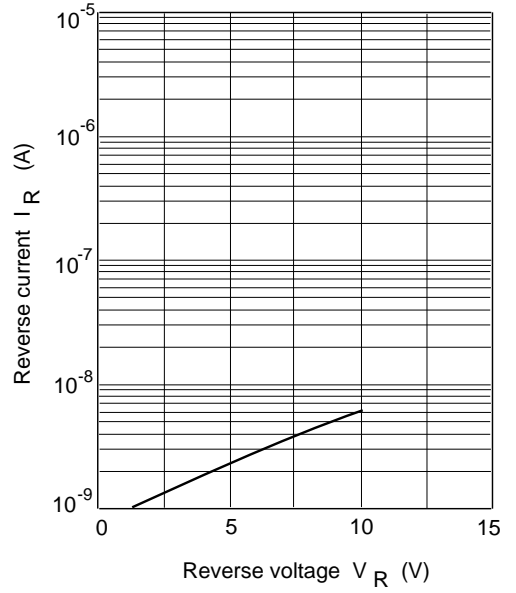


Fig.2 Reverse current Vs. Reverse voltage

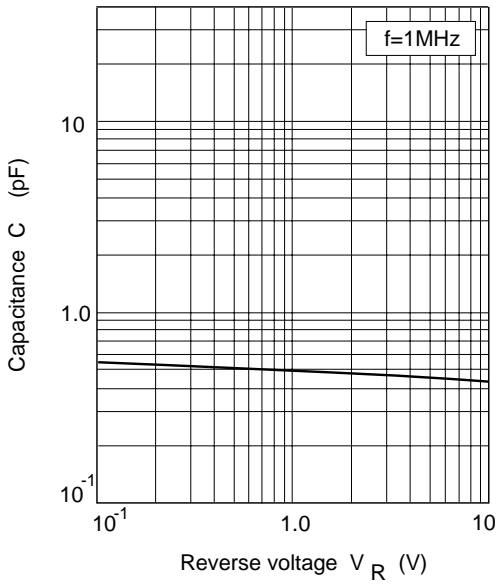
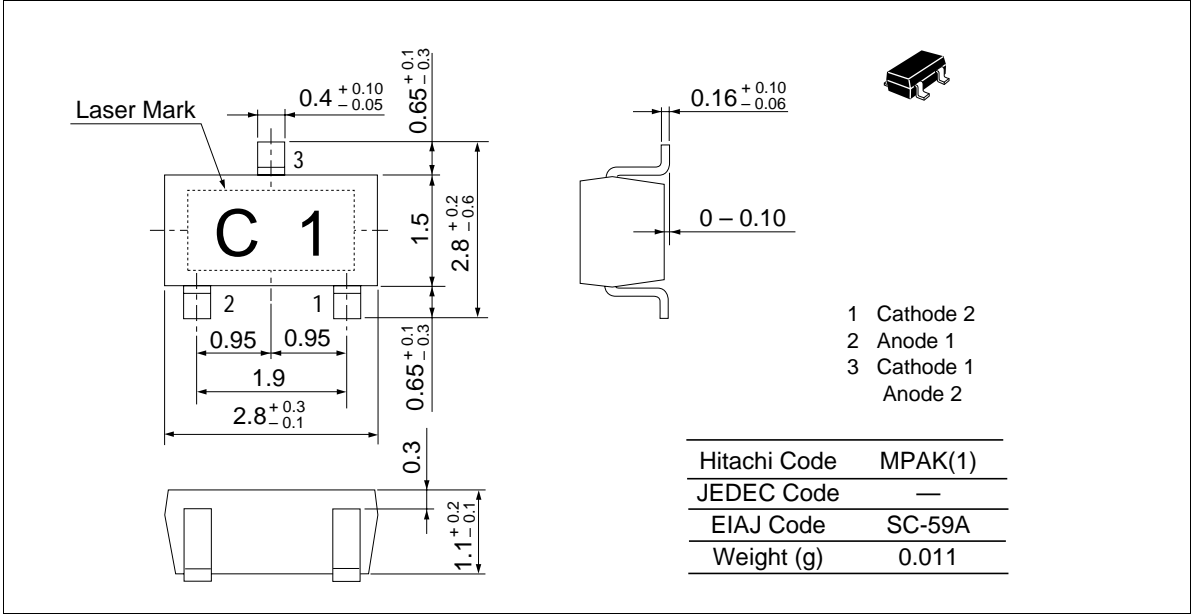


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit : mm



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