

## HSM276SR

### Silicon Schottky Barrier Diode for Detector and Mixer

REJ03G0139-0500Z  
(Previous: ADE-208-040D)  
Rev.5.00  
Nov.10.2003

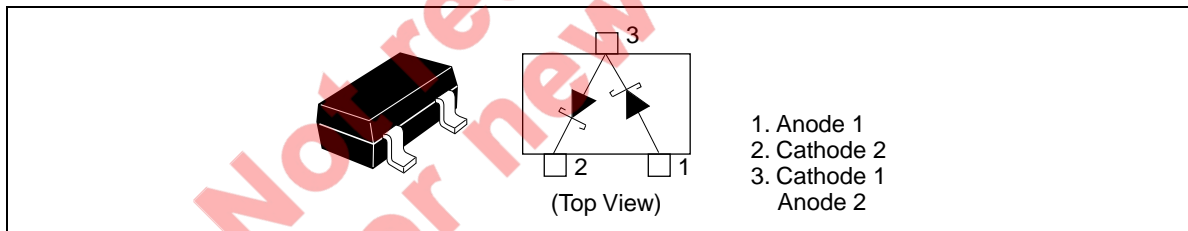
#### Features

- High forward current, Low capacitance.
- HSM276SR which is interconnected in series configuration is designed for balanced mixer use.
- MPAK package is suitable for high density surface mounting and high speed assembly.

#### Ordering Information

Type No.	Laser Mark	Package Code
HSM276SR	C9	MPAK

#### Pin Arrangement



**Absolute Maximum Ratings**

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V <sub>R</sub>	3	V
Average rectified current	I <sub>O</sub> <sup>*1</sup>	30	mA
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-55 to +125	°C

Note: 1. Per one device

**Electrical Characteristics**<sup>\*1</sup>

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	V <sub>R</sub>	3	—	—	V	I <sub>R</sub> = 1 mA
Reverse current	I <sub>R</sub>	—	—	50	μA	V <sub>R</sub> = 0.5 V
Forward current	I <sub>F</sub>	35	—	—	mA	V <sub>F</sub> = 0.5 V
Capacitance	C	—	—	0.9	pF	V <sub>R</sub> = 0.5 V, f = 1 MHz
Capacitance deviation	ΔC	—	—	0.1	pF	V <sub>R</sub> = 0.5 V, f = 1 MHz
ESD-Capability <sup>*2</sup>	—	30	—	—	V	C = 200 pF, R = 0 Ω, Both forward and reverse direction 1 pulse.

Notes: 1. Per one device

2. Failure Criterion; I<sub>R</sub> ≥ 100 μA at V<sub>R</sub> = 0.5 V

Main Characteristics

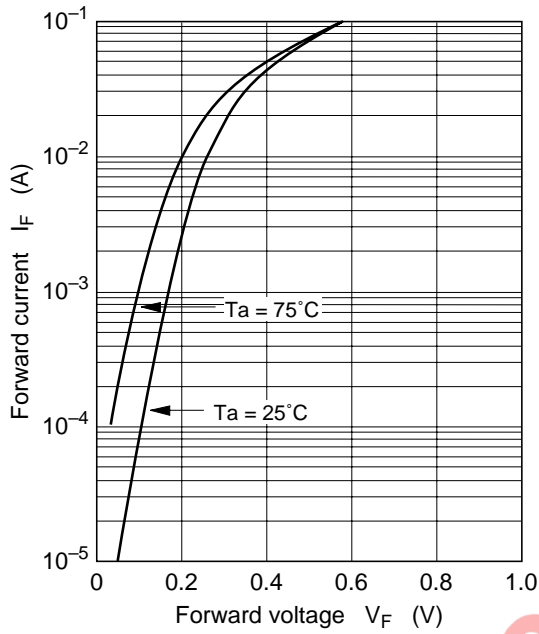


Fig.1 Forward current vs. Forward voltage

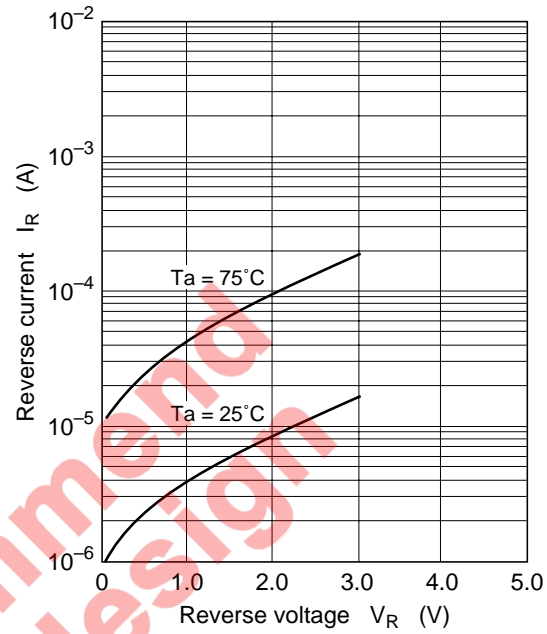


Fig.2 Reverse current vs. Reverse voltage

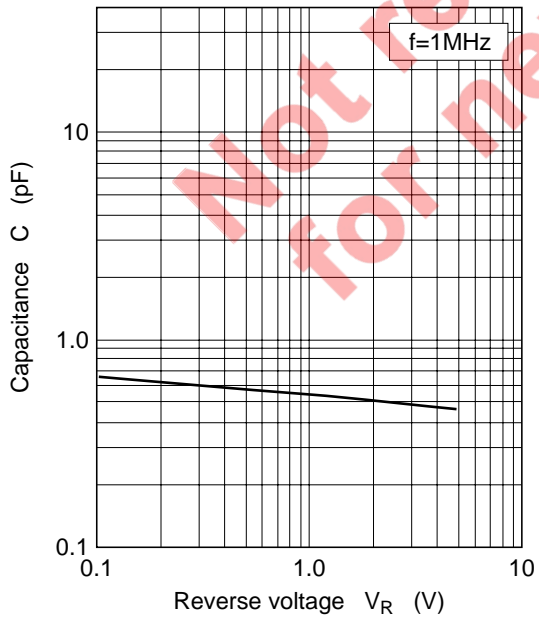
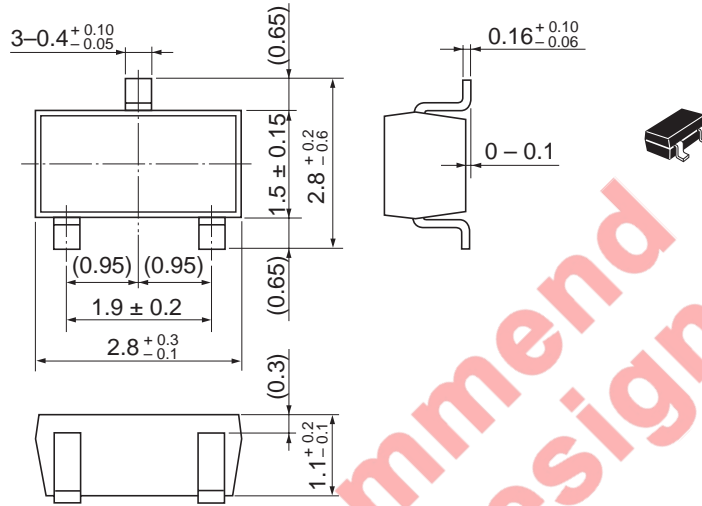


Fig.3 Capacitance vs. Reverse voltage

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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