HSM276ASR

Silicon Schottky Barrier Diode for Balanced Mixer

REJ03G0609-0100
(Previous: ADE-208-840)
Rev.1.00
Apr 25, 2005

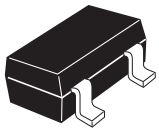
Features

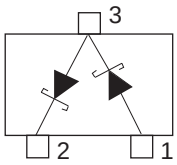
- High forward current, Low capacitance.
- HSM276ASR which is interconnected in series configuration is designed for balanced mixer use.
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code (Previous Code)
HSM276ASR	S20	MPAK	PLSP0003ZC-A (MPAK)

Pin Arrangement





(Top View)

1. Anode 1
2. Cathode 2
3. Cathode 1
   Anode 2

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	5	V
Reverse voltage	V_R	3	V
Average rectified current	I_O *1	30	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–55 to +125	°C

Note: 1. Per one device

Electrical Characteristics *1

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	V_R	3	—	—	V	I_R = 1 mA
Reverse current	I_R	—	—	50	µA	V_R = 0.5 V
Forward current	I_F	35	—	—	mA	V_F = 0.5V
Capacitance	C	—	—	0.90	pF	V_R = 0.5 V, f = 1 MHz
Capacitance deviation	ΔC	—	—	0.10	pF	V_R = 0.5 V, f = 1 MHz
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 ; $I_R \geq 100$ µA at V_R = 0.5 V

Main Characteristic

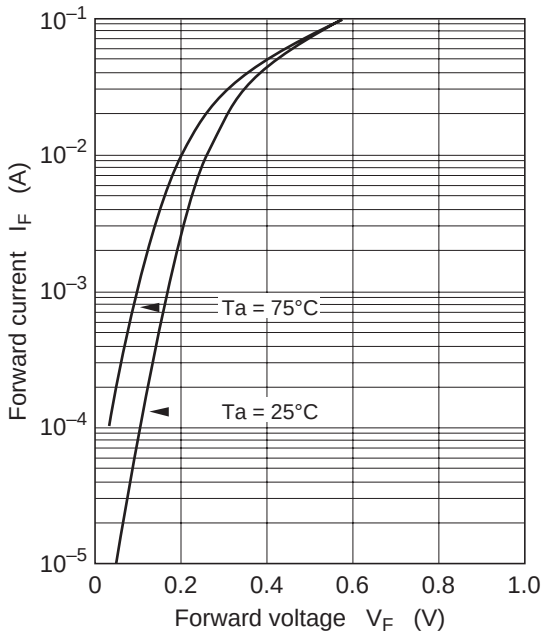


Fig.1 Forward current vs. Forward voltage

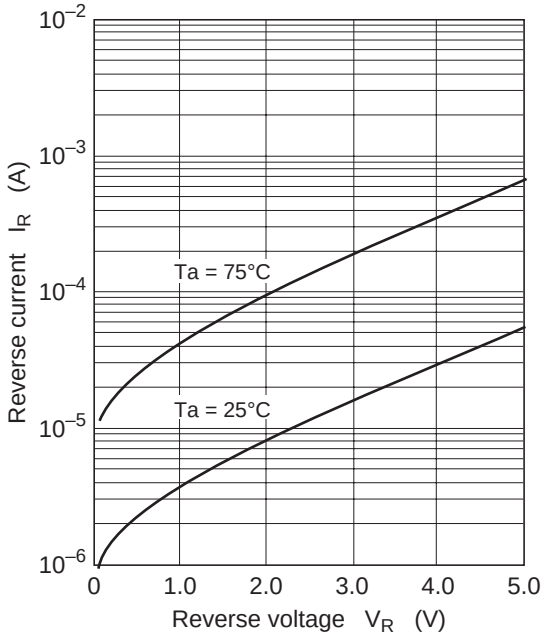


Fig.2 Reverse current vs. Reverse voltage

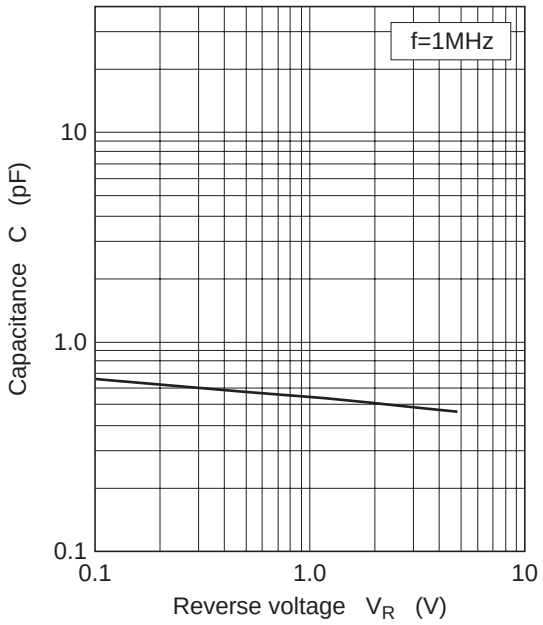
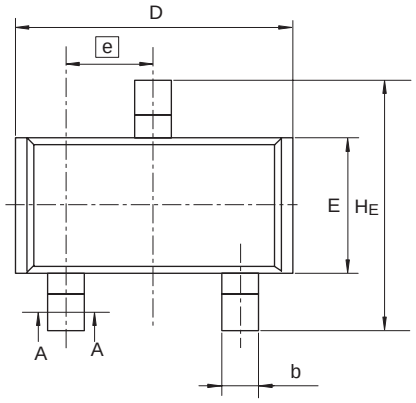
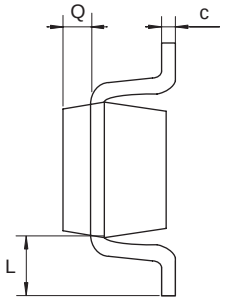


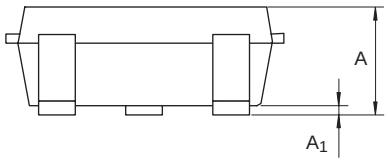
Fig.3 Capacitance vs. Reverse voltage

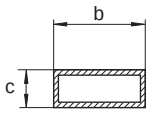
Package Dimensions

JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
SC-59A	PLSP0003ZC-A	MPAK(D) / MPAK(D)V	0.011g

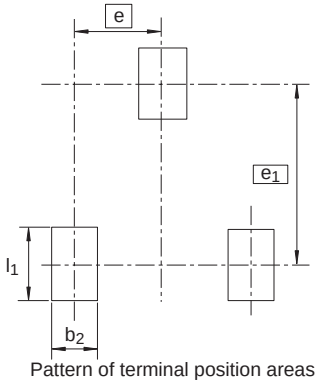








A — A Section



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	1.0	-	1.3
A_1	0	-	0.1
b	0.35	0.4	0.5
c	0.1	0.16	0.26
D	2.7	-	3.1
E	1.35	1.5	1.65
e	-	0.95	-
H_E	2.2	2.8	3.0
L	-	0.65	-
b_2	-	-	0.55
e_1	-	1.95	-
l_1	-	-	1.05
Q	-	0.3	-

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