HSM198S

Silicon Schottky Barrier Diode for Various Detector

REJ03G0607-0400
(Previous: ADE-208-090C)
Rev.4.00
Apr 25, 2005

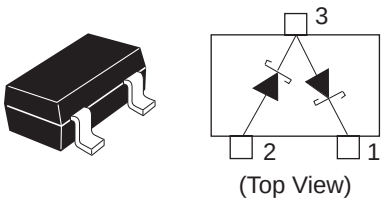
Features

- Detection efficiency is very good.
- Small temperature coefficient.
- HSM198S 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)
HSM198S	C6	MPAK	PLSP0003ZC-A (MPAK)

Pin Arrangement



(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 forward current	I_O *1	30	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–55 to +125	°C

Note: 1. Two device total

Electrical Characteristics *1

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	1.1	V	I_F = 5 mA
Forward current	I_F	4.5	—	—	mA	V_F = 1 V
Reverse current	I_R	—	—	70	µA	V_R = 6 V
Capacitance	C	—	—	1.5	pF	V_R = 1 V, f = 1 MHz
Capacitance deviation	ΔV_F	—	—	10	mV	I_F = 5 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 Criterrion; I_R > 140 µA at V_R = 6 V

Main Characteristic

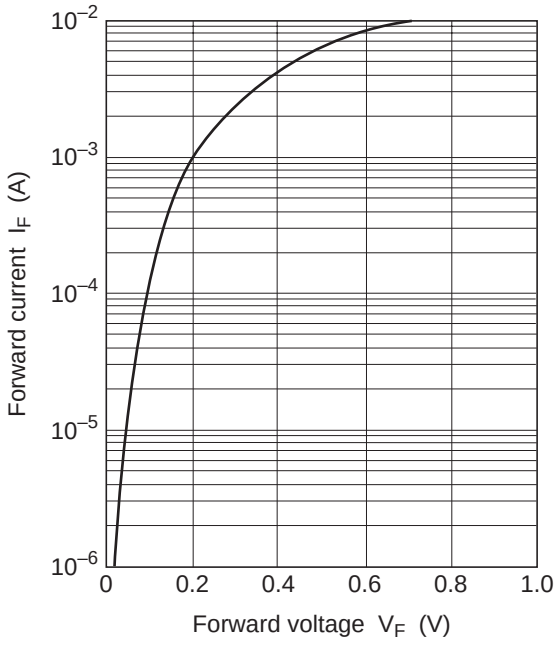


Fig.1 Forward current vs. Forward voltage

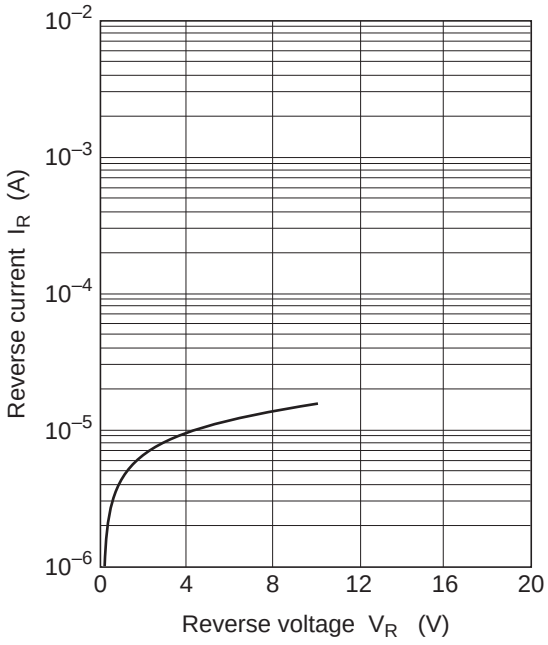


Fig.2 Reverse current vs. Reverse voltage

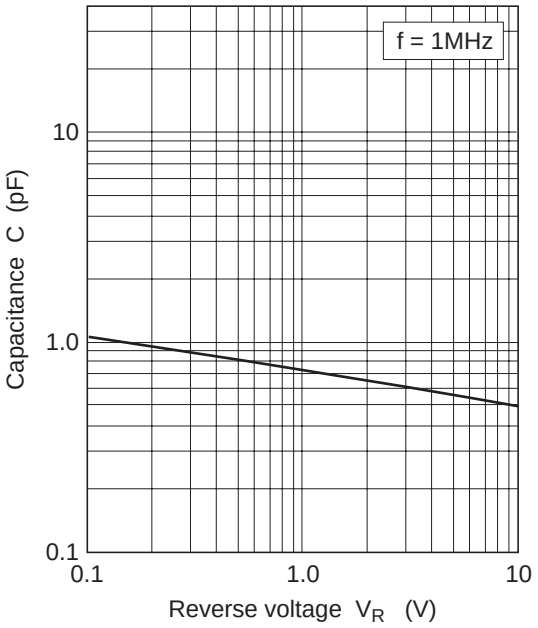
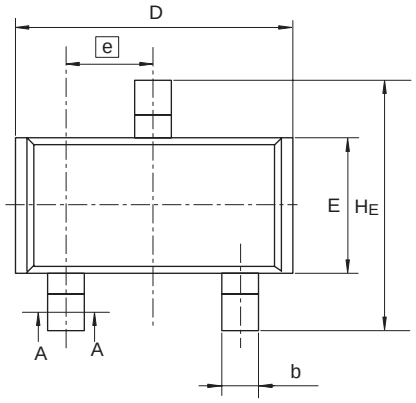
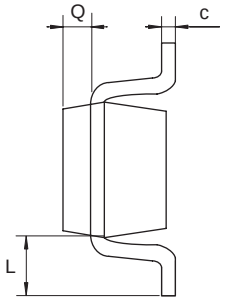


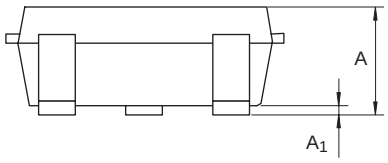
Fig.3 Capacitance vs. Reverse voltage

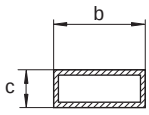
Package Dimensions

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

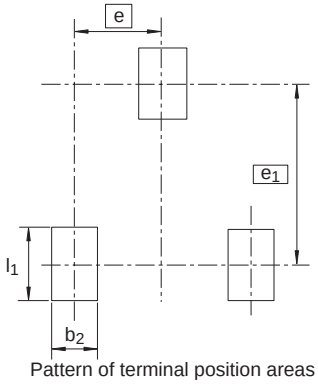








A — A Section



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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http://www.renesas.com

Refer to "**http://www.renesas.com/en/network**" for the latest and detailed information.

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Colophon 2.0