

HSM198S

Silicon Schottky Barrier Diode for Various Detector

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

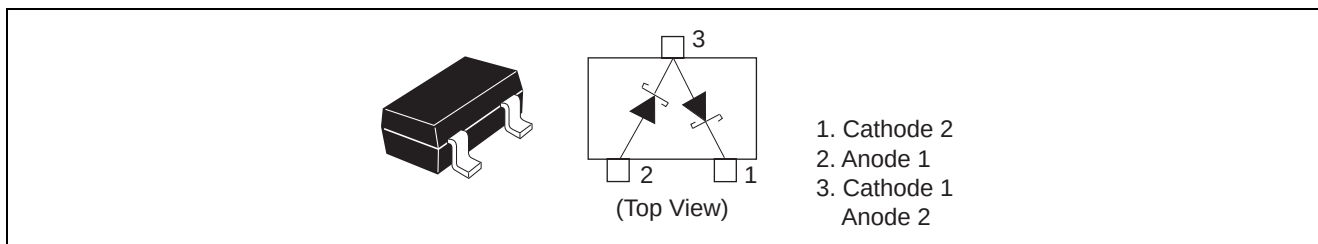
Features

- 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



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	T_j	125	°C
Storage temperature	T_{stg}	-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 Criterion; $I_R > 140$ μA at $V_R = 6$ V

Main Characteristic

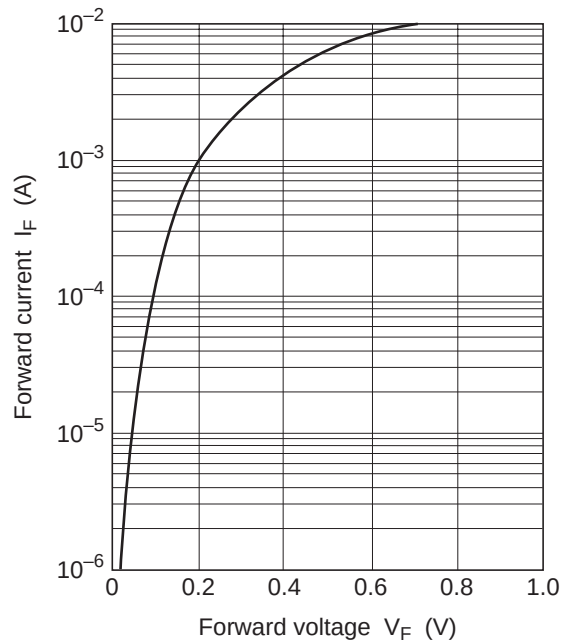


Fig.1 Forward current vs. Forward voltage

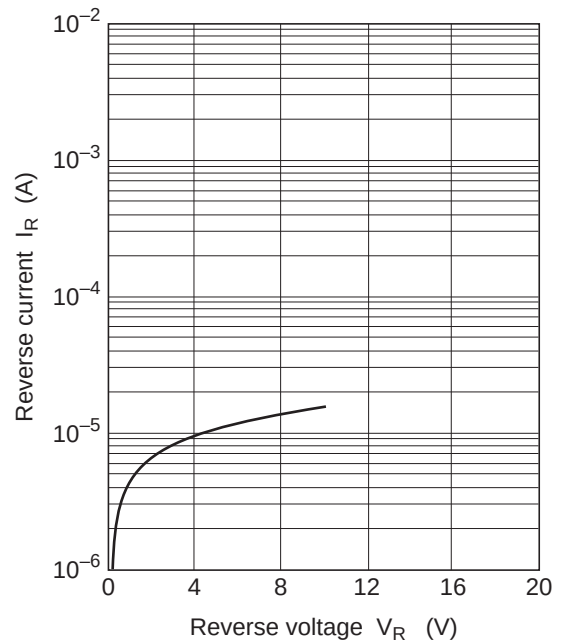


Fig.2 Reverse current vs. Reverse voltage

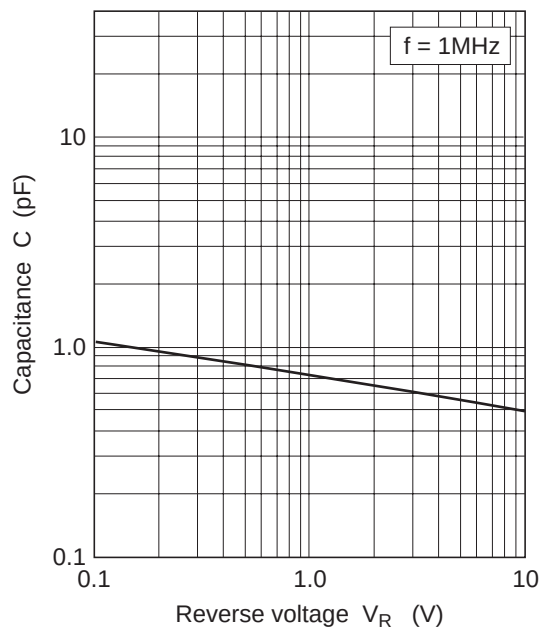
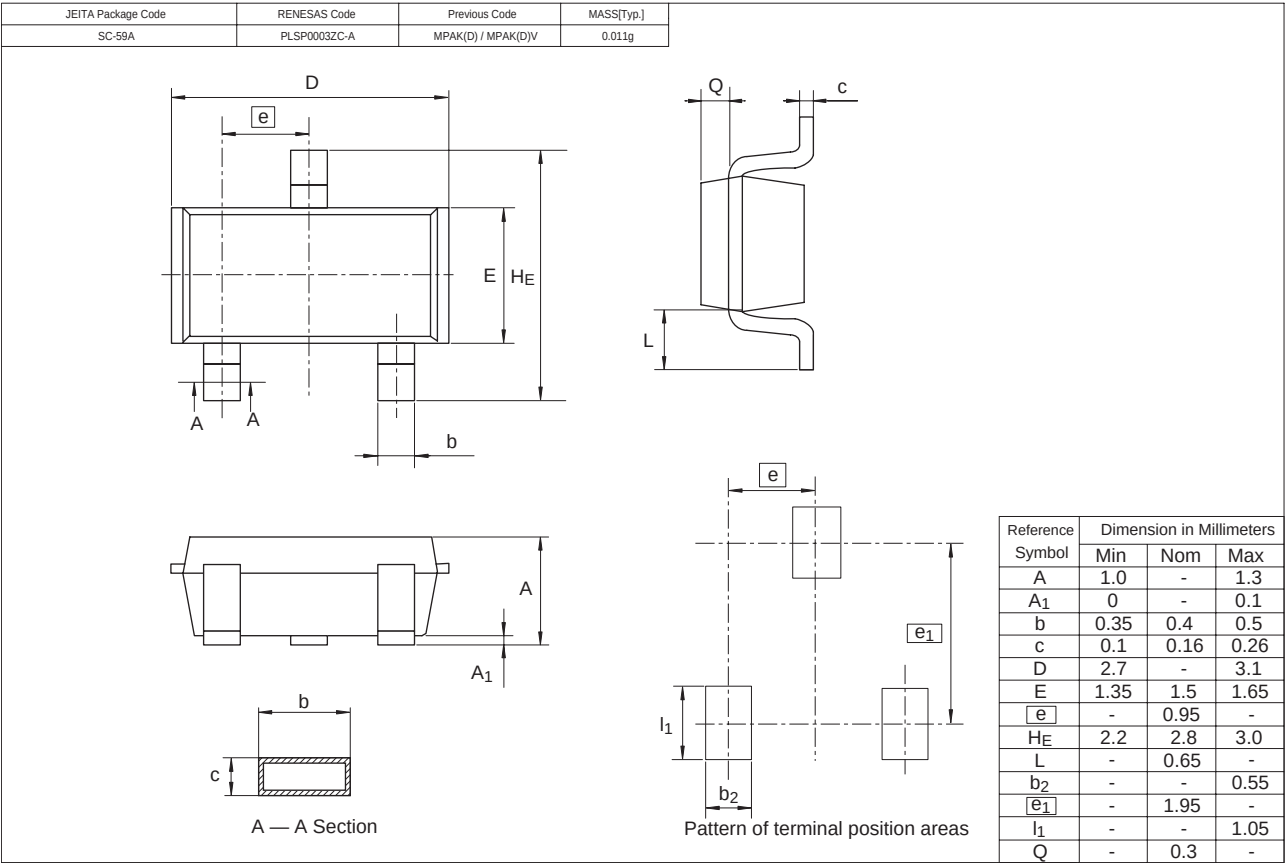


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions



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