

HSM123

Silicon Epitaxial Planar Diode for High Speed Switching

REJ03G0550-0800 Rev.8.00 Dec 12, 2008

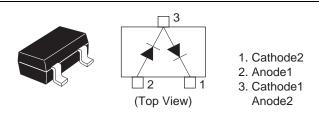
Features

- Low capacitance, proof against high voltage.
- Fast recovery time. (trr = 3.0ns max)
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

				Taping Abbreviation
Part No	Laser Mark	Package Name	Package Code	(Quantity)
HSM123TL	A9	MPAK	PLSP0003ZC-A	TL (3,000 pcs / reel)
HSM123TR	A9	MPAK	PLSP0003ZC-A	TR (3,000 pcs / reel)

Pin Arrangement



Absolute Maximum Ratings *1

 $(Ta = 25^{\circ}C)$

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	85	V
Reverse voltage	V_R	80	V
Peak forward current	I _{FM}	300	mA
Non-Repetitive peak forward surge current	I _{FSM} * ²	4	А
Average rectified current	I ₀	100	mA
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

Notes: 1. Per one device.

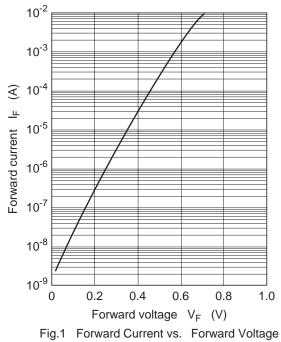
2. Within 1 μs forward surge current.

Electrical Characteristics

 $(Ta = 25^{\circ}C)$

Item	Symbol	Min	Тур	Max	Unit	Test Condition
Forward voltage	V _F	_	0.70	1.0	V	I _F = 10 mA
	V _F	_	0.79	1.0	V	I _F = 50 mA
	V _F	_	0.85	1.2	V	I _F = 100 mA
Reverse current	I_R	_	_	0.1	μΑ	V _R = 80 V
Capacitance	С	_	1.0	4.0	pF	$V_R = 0 V, f = 1 MHz$
Reverse recovery time	t _{rr}		_	3.0	ns	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 50$ Ω

Main Characteristics



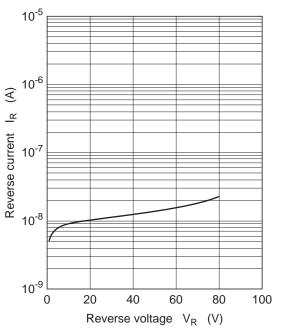


Fig.2 Reverse Current vs. Reverse Voltage

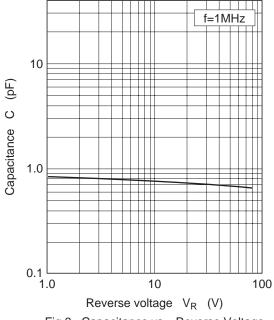
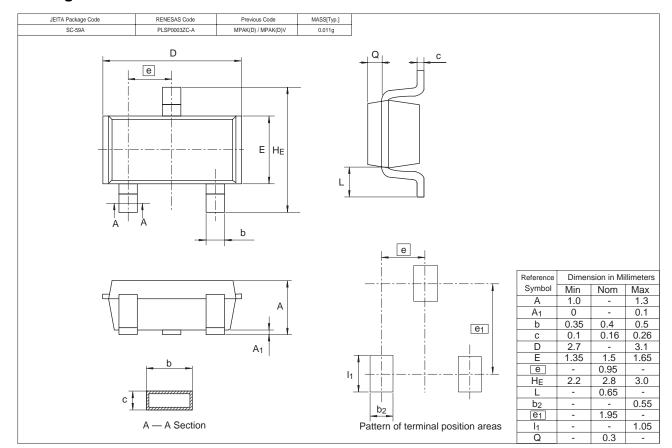


Fig.3 Capacitance vs. Reverse Voltage

Package Dimensions



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