

HSD119

Silicon Epitaxial Planar Diode for High Speed Switching

REJ03G1309-0100

Rev.1.00

Oct 27, 2005

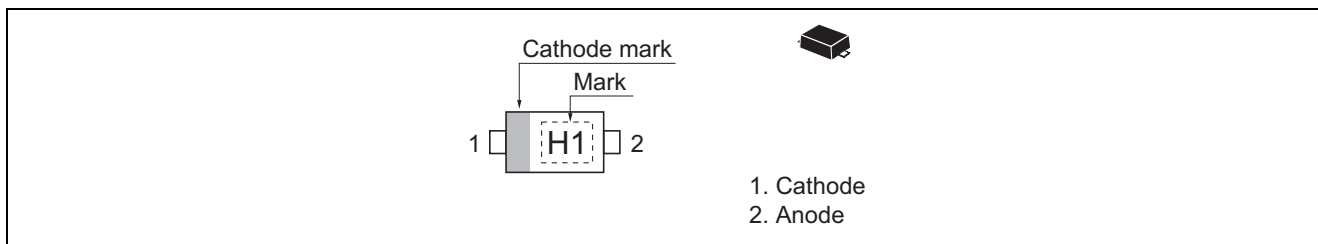
Features

- Low capacitance. ($C = 2.0$ pF max)
- Short reverse recovery time. ($t_{rr} = 3.0$ ns max)
- Super small Flat Lead Package (SFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code (Previous Code)
HSD119	H1	SFP	PUSF0002ZB-A (SFP)

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	85	V
Reverse voltage	V_R	80	V
Average rectified current	I_O	100	mA
Peak forward current	I_{FM}	300	mA
Non-Repetitive peak forward surge current	I_{FSM}^*	4	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

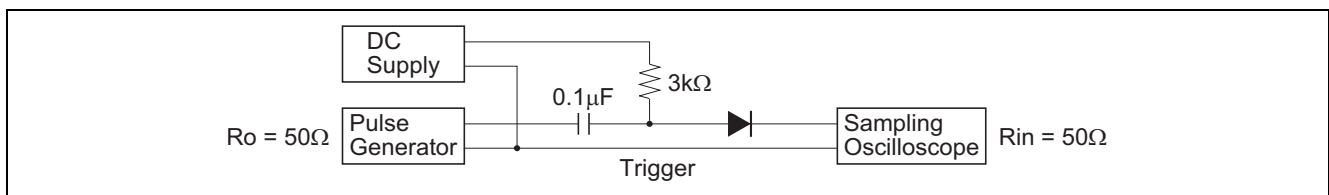
Note: Within 1μs forward surge current.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	—	—	0.8	V	$I_F = 10\text{ mA}$
	V_{F2}	—	—	1.2		$I_F = 100\text{ mA}$
Reverse current	I_R	—	—	0.1	μA	$V_R = 80\text{ V}$
Capacitance	C	—	—	2.0	pF	$V_R = 0\text{ V}$, $f = 1\text{ MHz}$
Reverse recovery time* ¹	t_{rr}	—	—	3.0	ns	$I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 50\text{ }\Omega$

Note: 1. Reverse recovery time test circuit



Main Characteristics

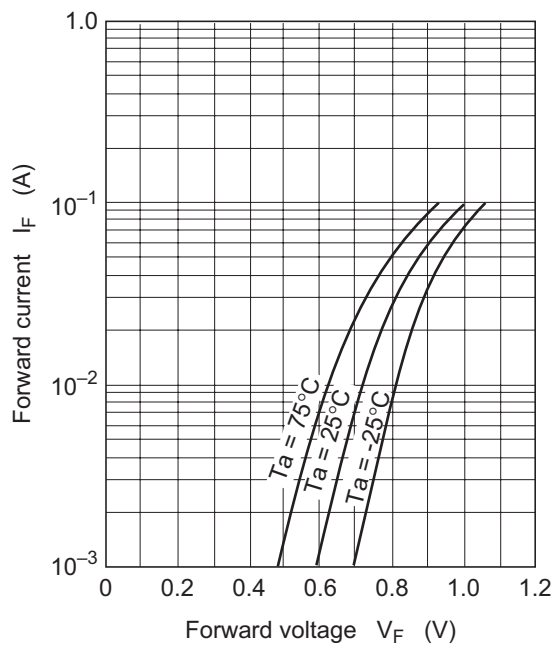


Fig.1 Forward current vs. Forward voltage

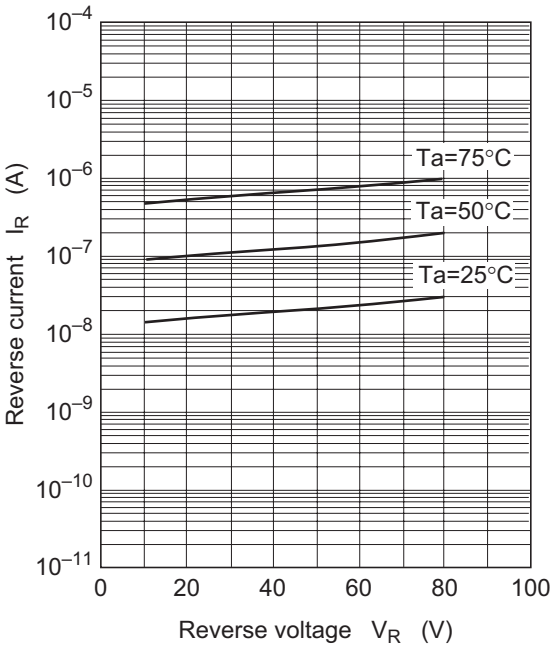


Fig.2 Reverse current vs. Reverse voltage

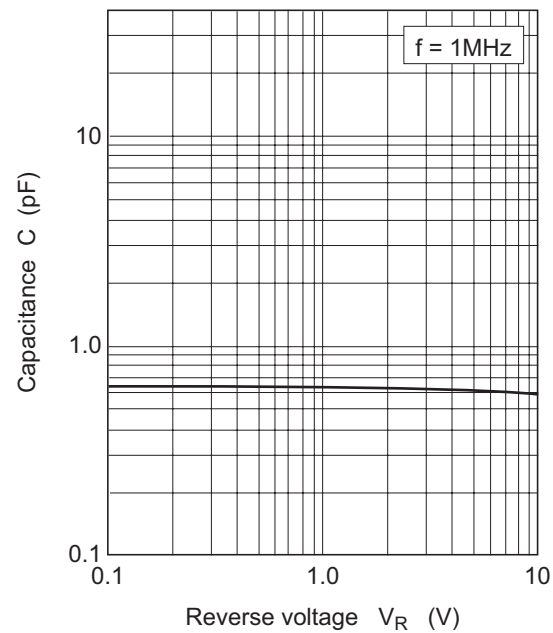
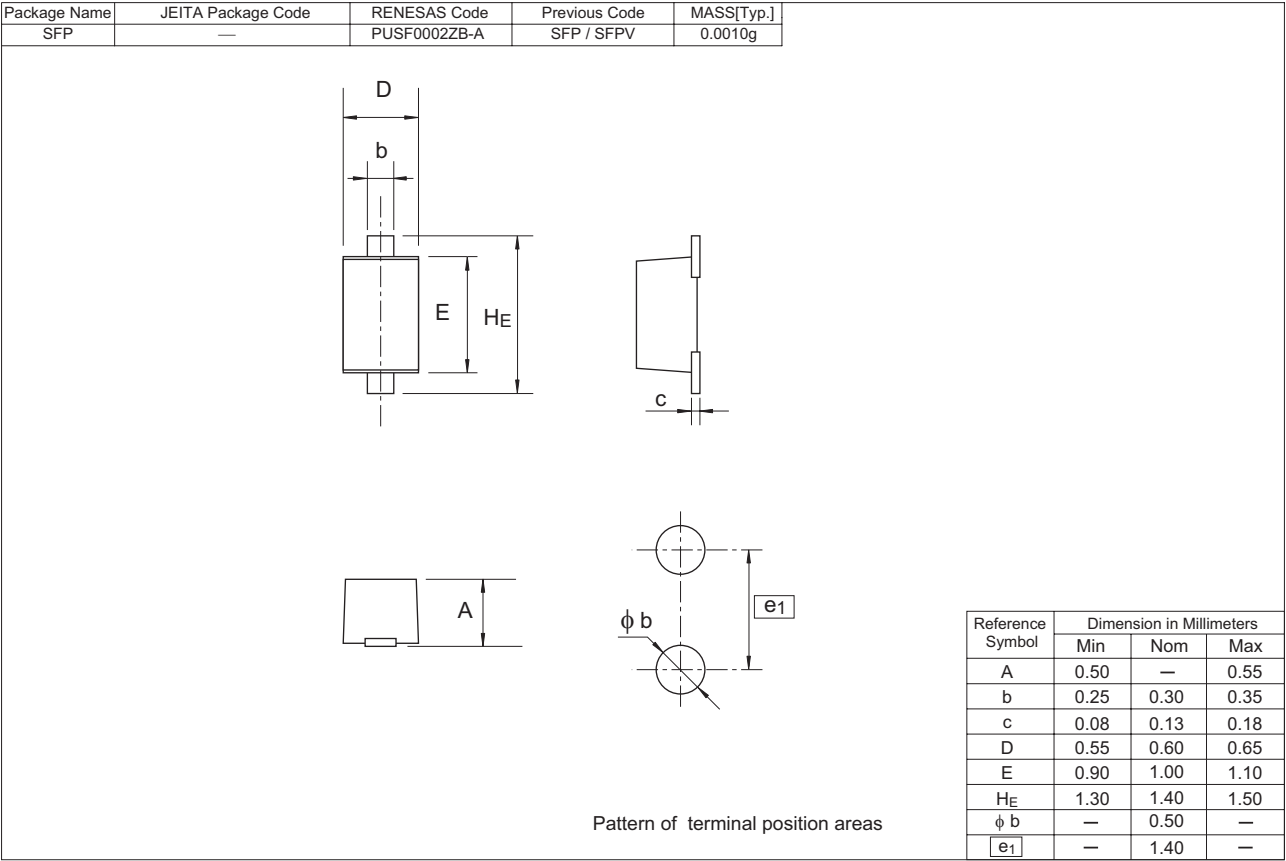


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions



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