

1SS118

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

ADE-208-297 (Z)
Rev. 0

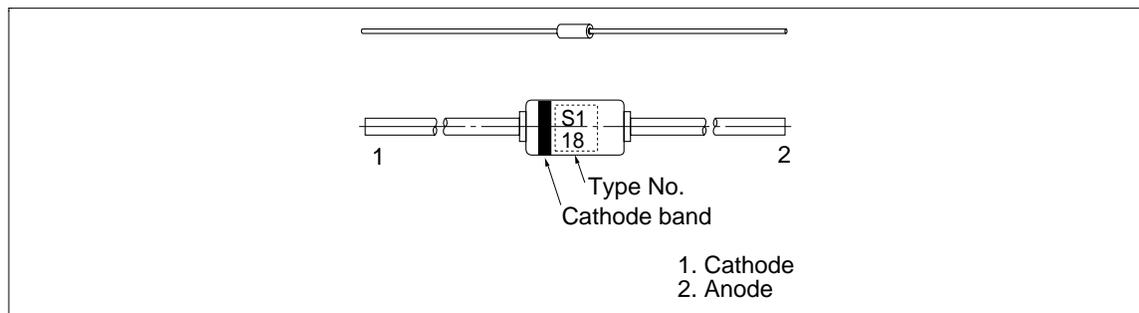
Features

- High average forward current. ($I_O = 200\text{mA}$)
- High reliability with glass seal.

Ordering Information

Type No.	Cathode band	Mark	Package Code
1SS118	Black	S118	DO-35

Outline



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Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	75	V
Reverse voltage	V_R	50	V
Peak forward current	I_{FM}	600	mA
Non-Repetitive peak forward surge current	I_{FSM}^*	4	A
Average forward current	I_O	200	mA
Power dissipation	P_d	500	mW
Junction temperature	T_j	175	°C
Storage temperature	T_{stg}	-65 to +175	°C

Note: Value at duration of 1μs

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	1.0	V	$I_F = 10mA$
Reverse current	I_R	—	—	0.1	μA	$V_R = 50V$
Capacitance	C	—	—	3.5	pF	$V_R = 0V, f = 1MHz$
Reverse recovery time	t_{rr}	—	—	3.0	ns	$I_F = 10mA, V_R = 6V, I_{rr} = 0.1I_R, R_L = 50\Omega$

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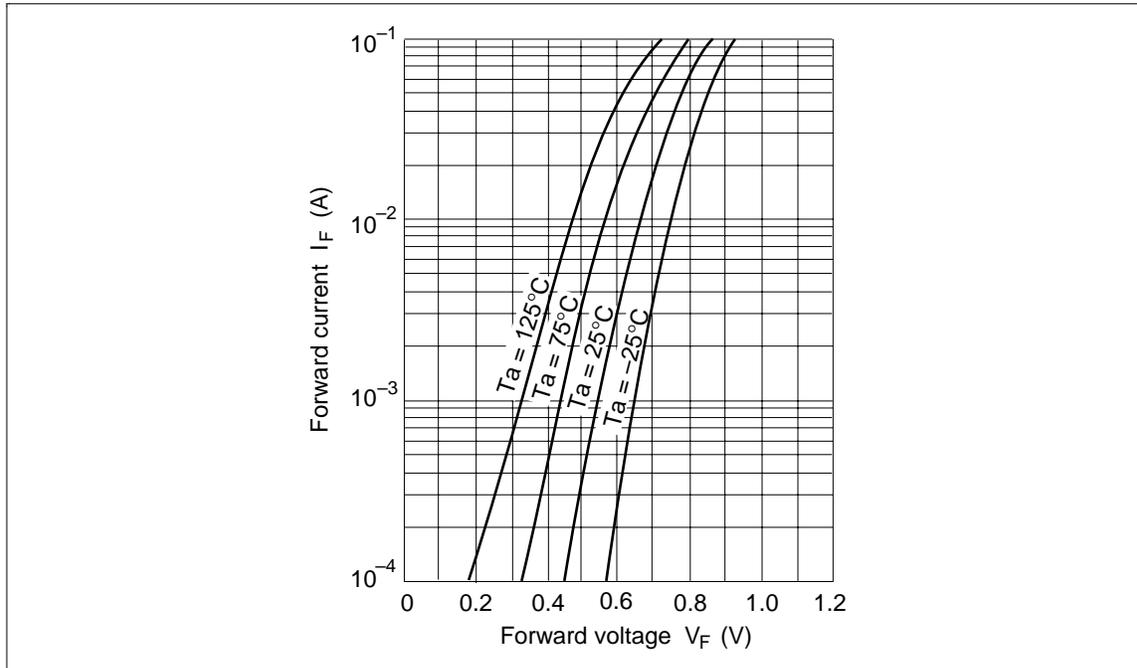


Fig.1 Forward current Vs. Forward voltage

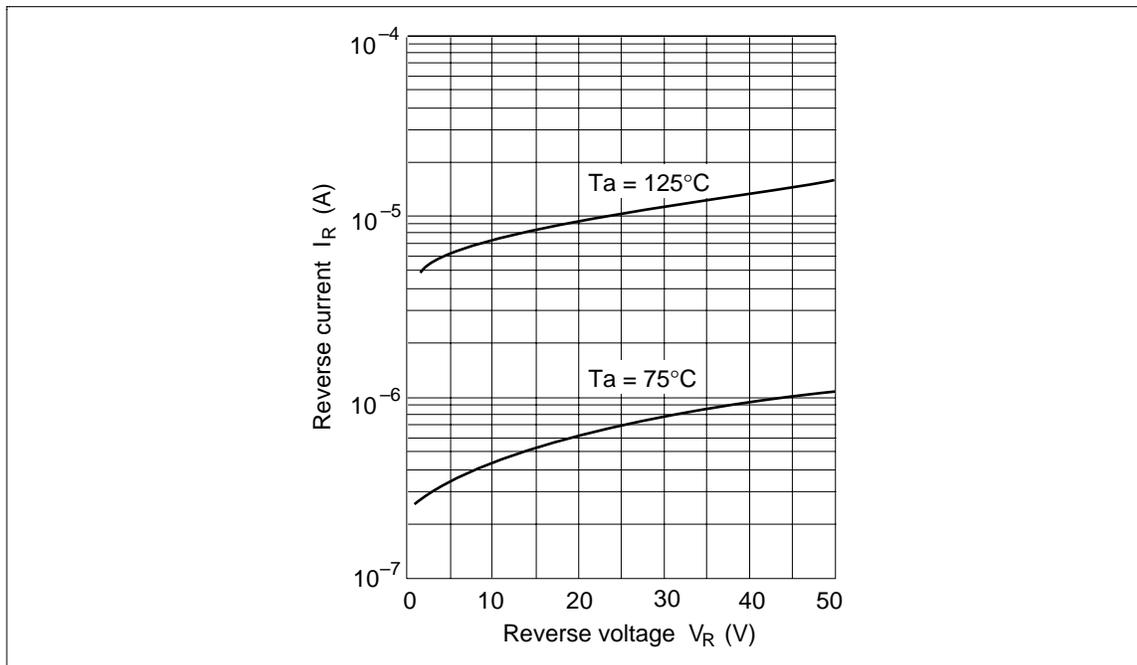


Fig.2 Reverse current Vs. Reverse voltage

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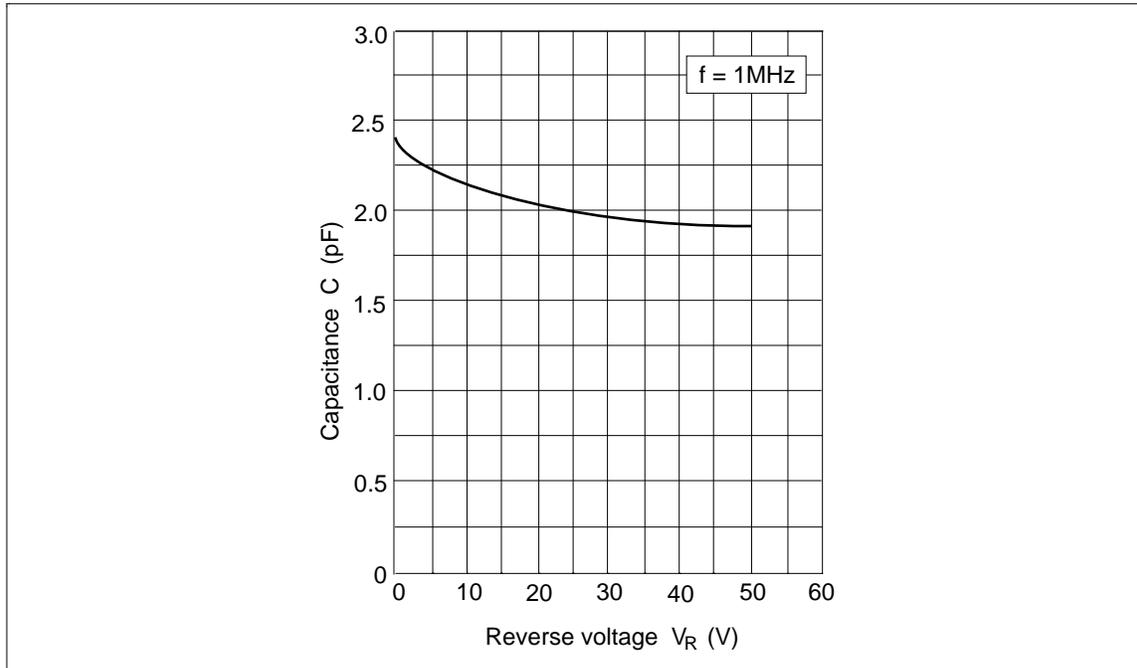


Fig.3 Capacitance Vs. Reverse voltage

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Package Dimensions

