

1SS118

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

 Rev. 0
 Dec. 1994

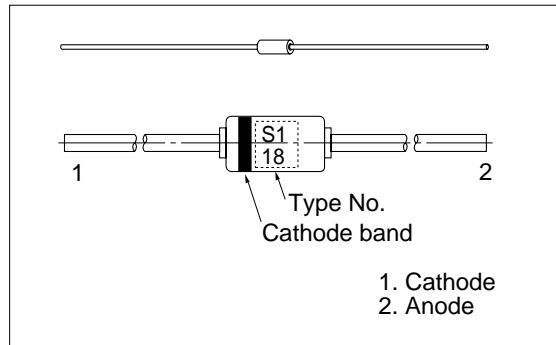
Features

- 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



Absolute Maximum Ratings ** ($T_a = 25^\circ\text{C}$)

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	$^\circ\text{C}$
Storage temperature	T_{stg}	-65 to +175	$^\circ\text{C}$

* Value at duration of $1\mu\text{s}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	1.0	V	$I_F = 100\text{ mA}$
Reverse current	I_R	—	—	0.1	μA	$V_R = 50\text{ V}$
Capacitance	C	—	—	3.5	pF	$V_R = 0\text{ V}, f = 1\text{ MHz}$
Reverse recovery time	t_{rr}	—	—	3.0	ns	$I_F=10\text{mA}, V_R=6\text{V}, I_{rr}=0.1I_R$ $R_L=50\Omega$

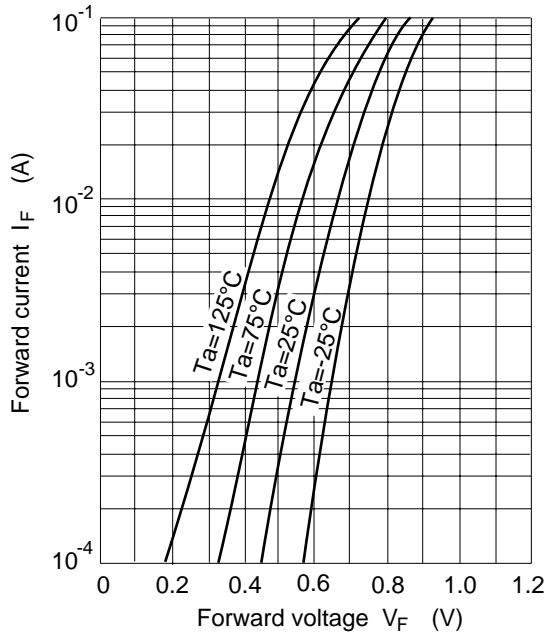


Fig.1 Forward current Vs. Forward voltage

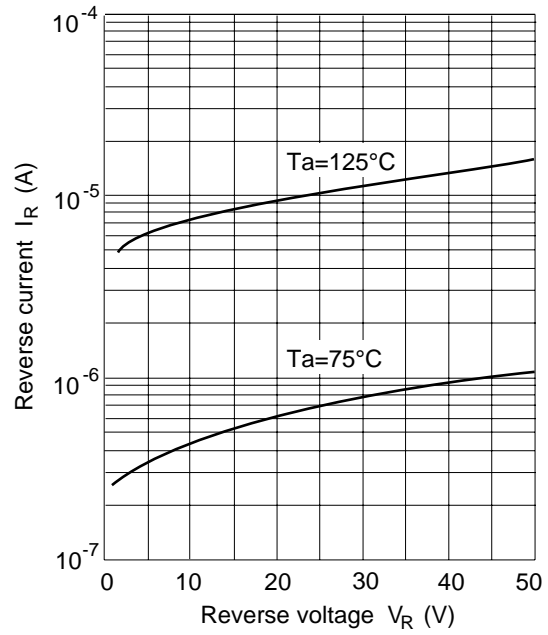


Fig.2 Reverse current Vs. Reverse voltage

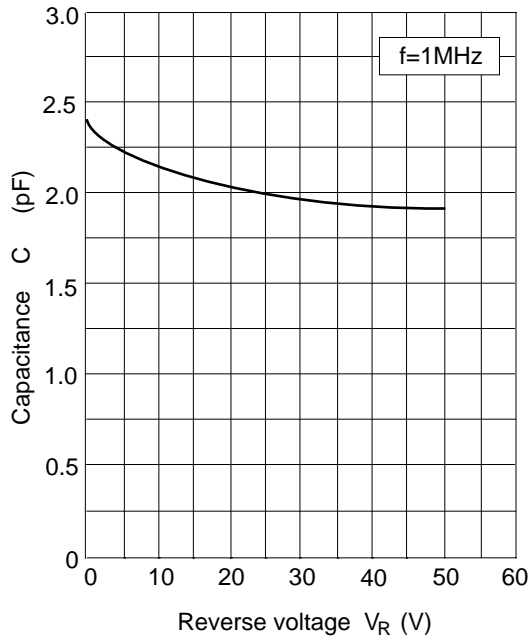
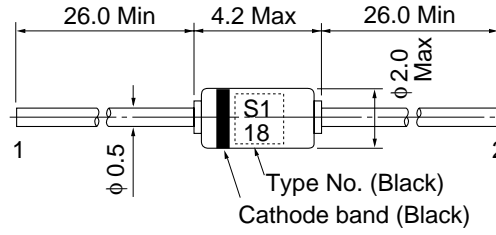


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



HITACHI Code	DO-35
JEDEC Code	DO-35
EIAJ Code	SC-48
Weight (g)	0.13