
1SS118

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

ADE-208-297 (Z)
Rev. 0

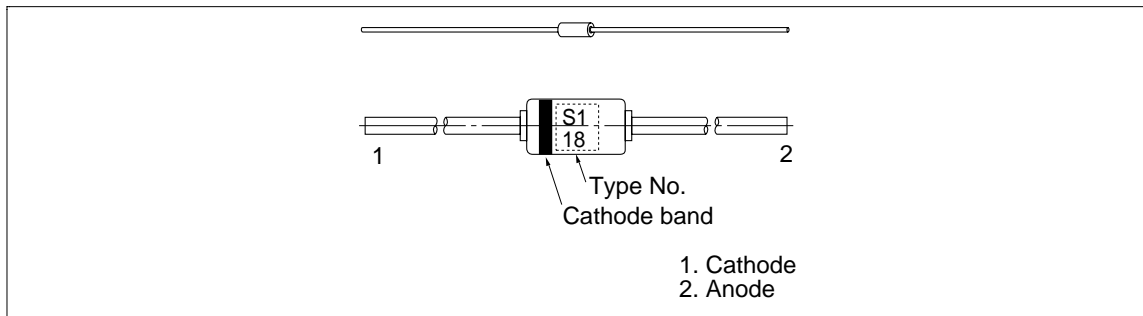
Features

- 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



1SS118

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	Pd	500	mW
Junction temperature	Tj	175	°C
Storage temperature	Tstg	-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	$I_F = 10\text{mA}$
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	$I_F = 10\text{mA}$, $V_R = 6\text{V}$, $I_{rr} = 0.1I_R$, $R_L = 50\Omega$

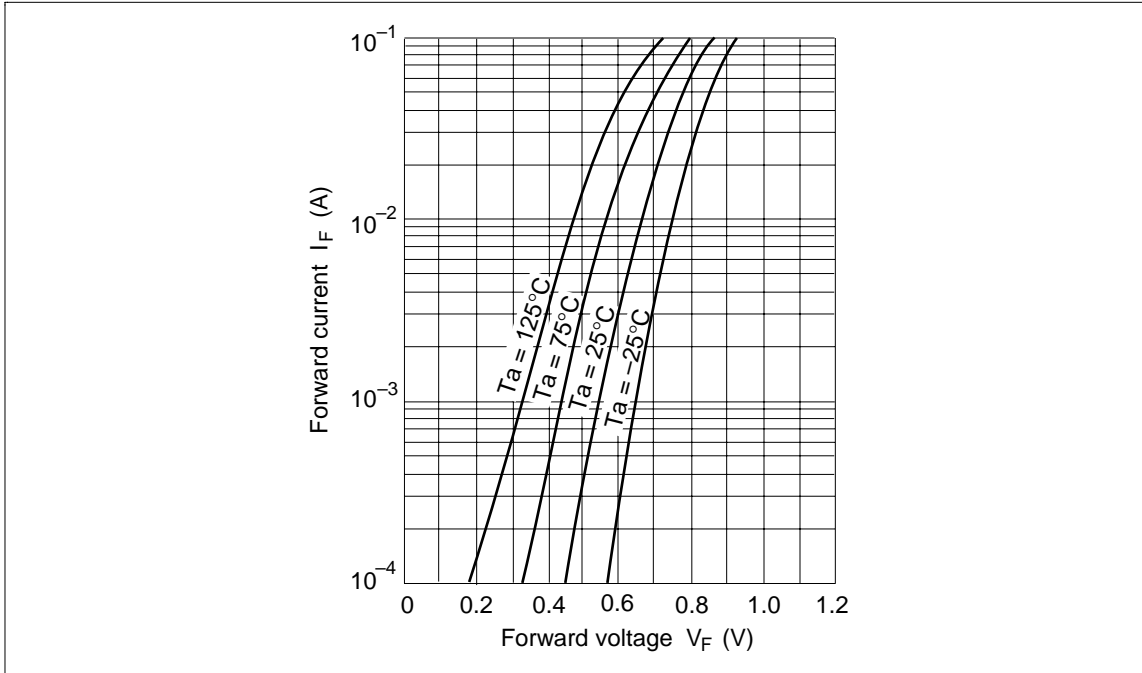


Fig.1 Forward current Vs. Forward voltage

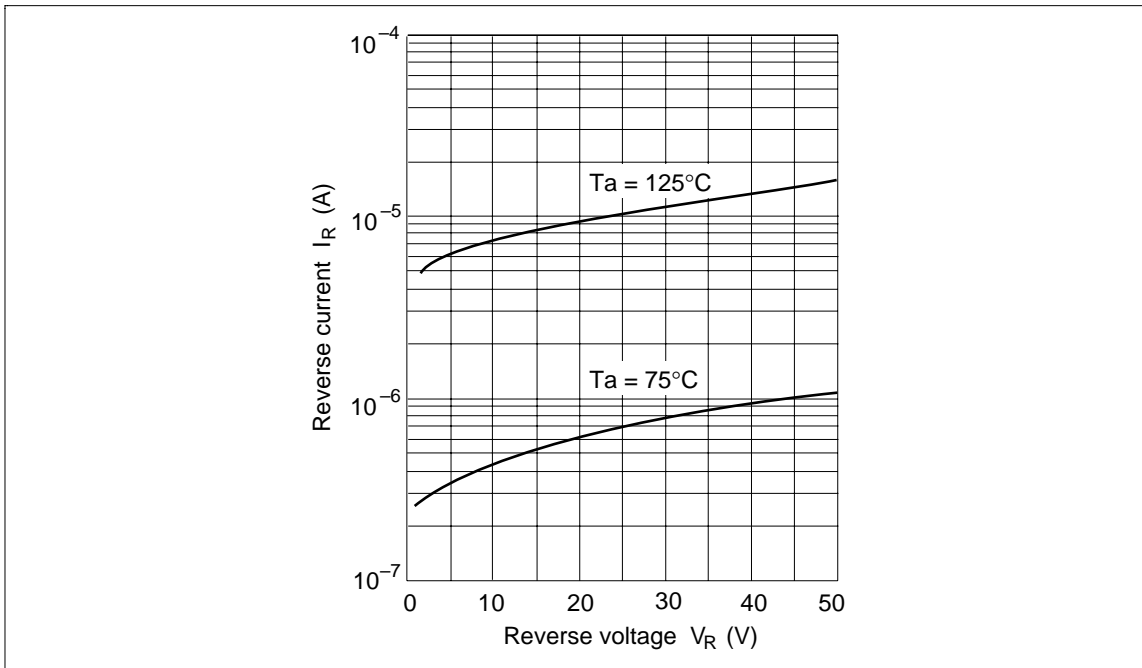


Fig.2 Reverse current Vs. Reverse voltage

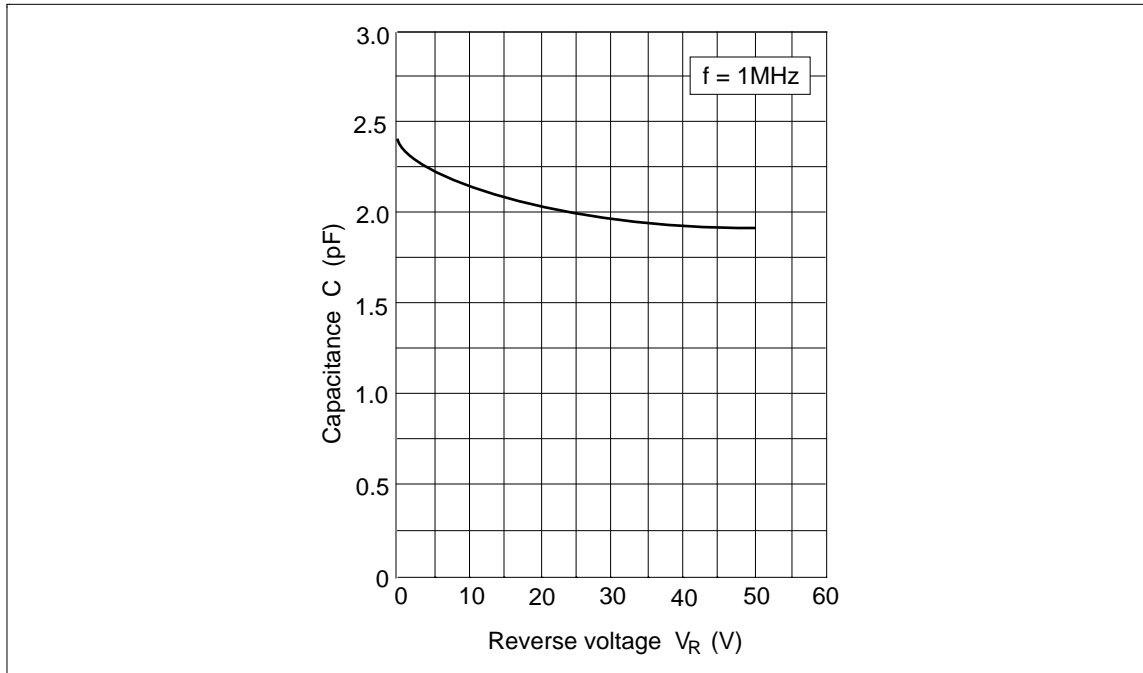
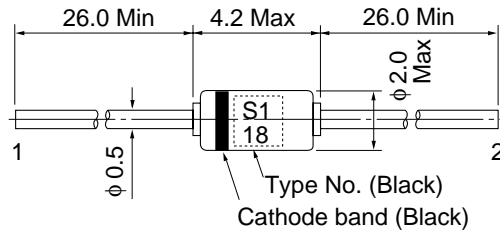


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



1 Cathode
2 Anode

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