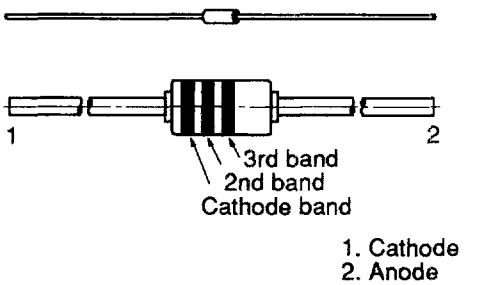
1SS83

Silicon Epitaxial Planar Diode for High Voltage Switching

Features

- High reverse voltage. (V_R=250V)
- High reliability with glass seal.

Outline



1. Cathode
2. Anode

Ordering Information

Type No.	Cathode band	2nd band	3rd band	Package Code
1SS83	Verdure	Light Blue	Light Blue	DO-35

Absolute Maximum Ratings ** (Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}*	300	V
Reverse voltage	V_R	250	V
Peak forward current	I_{FM}	625	mA
Non-Repetitive peak forward surge current	I_{FSM} **	1	A
Average forward current	I_o	200	mA
Power dissipation	P_d	400	mW
Junction temperature	T_j	175	°C
Storage temperature	T_{stg}	-65 to +175	°C

* Reverse voltage in excess of peak reverse voltage may deteriorate electrical characteristic.
** Within 1s forward surge current.

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	1.0	V	I_F = 100 mA
Reverse current	I_{R1}	—	—	0.2	μA	V_R = 250 V
	I_{R2}	—	—	100		V_R = 300 V
Capacitance	C	—	1.5	—	pF	V_R = 0 V, f = 1 MHz
Reverse recovery time	t_{rr}	—	—	100	ns	I_F=I_R=30mA, I_{rr}=3mA, R_L=100Ω

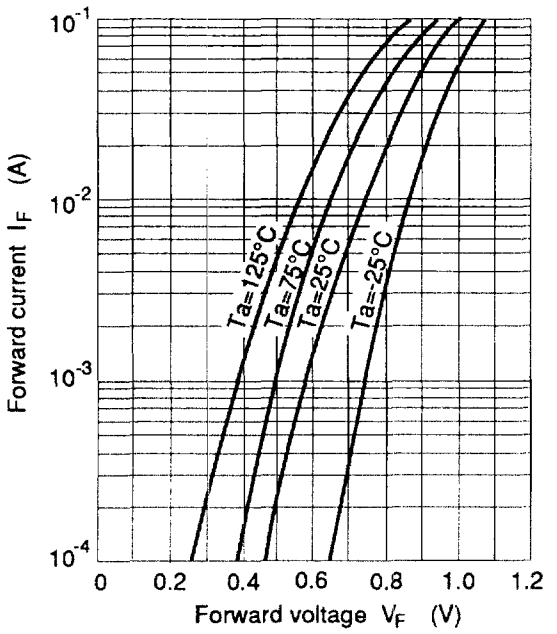


Fig.1 Forward current Vs. Forward voltage

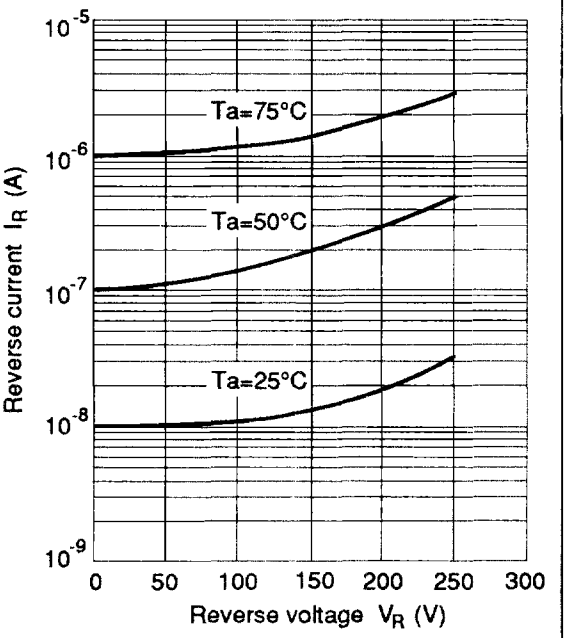


Fig.2 Reverse current Vs. Reverse voltage

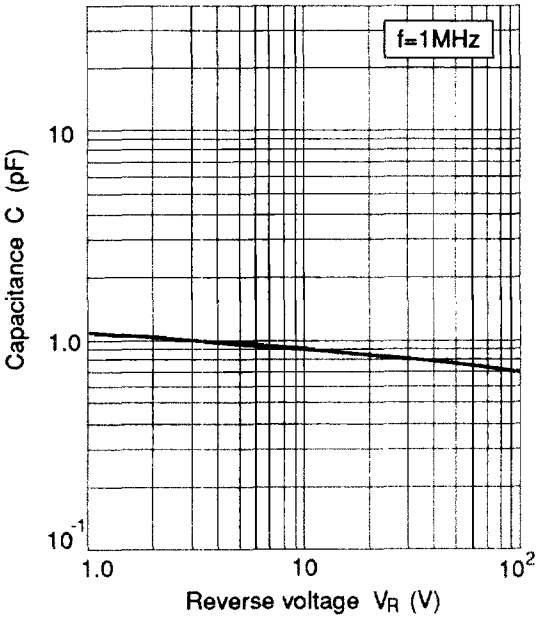


Fig.3 Capacitance Vs. Reverse voltage