

# 1SS119

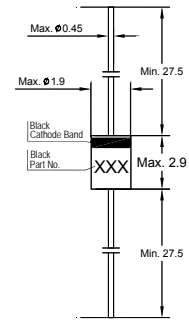
## Silicon Epitaxial Planar Switching Diode

### Features

- Low capacitance
- Short reverse recovery time

### Applications

- High-speed switching



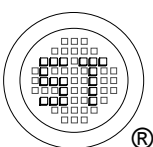
Glass Case DO-34  
Dimensions in mm

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

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	35	V
Reverse Voltage	$V_R$	30	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Peak Forward Current	$I_{FM}$	450	mA
Non-Repetitive Peak Forward Surge Current ( $t = 1\text{ s}$ )	$I_{FSM}$	1	A
Power Dissipation	$P_{tot}$	250	mW
Junction Temperature	$T_j$	175	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 175	$^\circ\text{C}$

### Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$	$V_F$	0.8	V
Reverse Current at $V_R = 30\text{ V}$	$I_R$	0.1	$\mu\text{A}$
Total Capacitance at $V_R = 1\text{ V}$ , $f = 1\text{ MHz}$	$C_{tot}$	3	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$ , $V_R = 6\text{ V}$ , $R_L = 50\ \Omega$	$t_{rr}$	3.5	ns



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Fig.1-Forward current Vs. Forward voltage

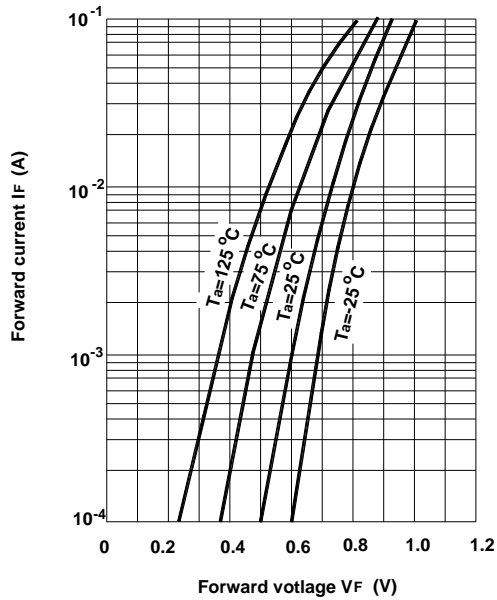


Fig.2- Reverse current Vs. Reverse voltage

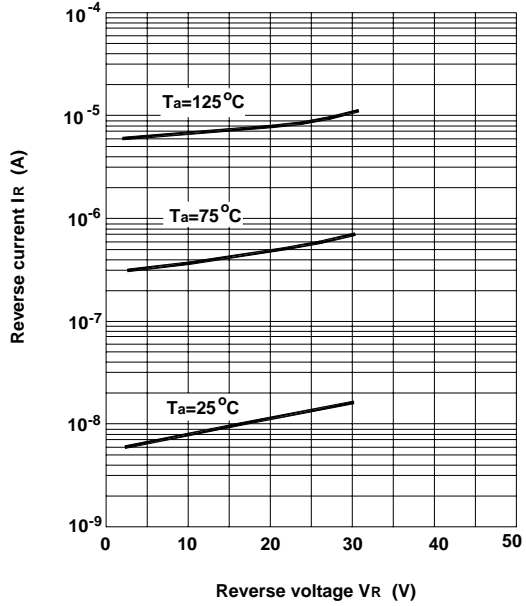
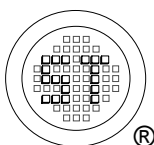
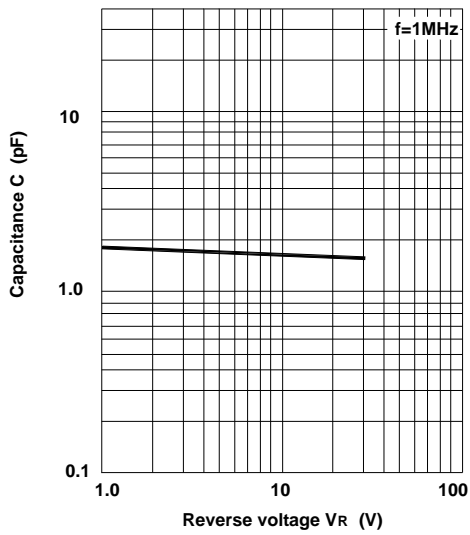


Fig.3- Capacitance Vs. Reverse voltage



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