

# 1SS254

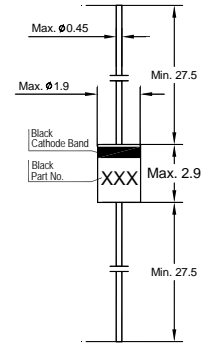
## Silicon Epitaxial Planar Switching Diode

### Features

- Ultra-high speed
- High withstand voltage
- Low leakage and high voltage

### Applications

- High-speed switching



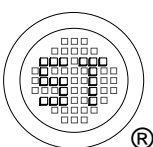
Glass Case DO-34  
Dimensions in mm

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

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	40	V
Reverse Voltage	$V_R$	35	V
Average Rectified Forward Current	$I_{F(AV)}$	110	mA
Peak Forward Current	$I_{FM}$	300	mA
Non-Repetitive Peak Forward Surge Current ( $t = 1\text{ s}$ )	$I_{FSM}$	400	mA
Junction Temperature	$T_j$	175	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 175	$^\circ\text{C}$

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

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	$V_F$	1.2	V
Reverse Current at $V_R = 35\text{ V}$	$I_R$	0.5	$\mu\text{A}$
Total Capacitance at $V_R = 0.5\text{ V}$ , $f = 1\text{ MHz}$	$C_{tot}$	3	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$ , $V_R = 6\text{ V}$	$t_{rr}$	4	ns



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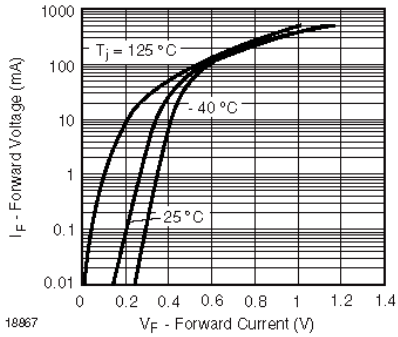


Figure 1. Typical Forward Voltage Forward Current at Various Temperatures

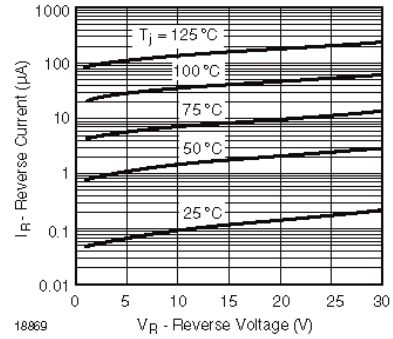
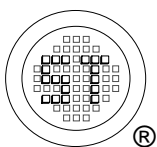
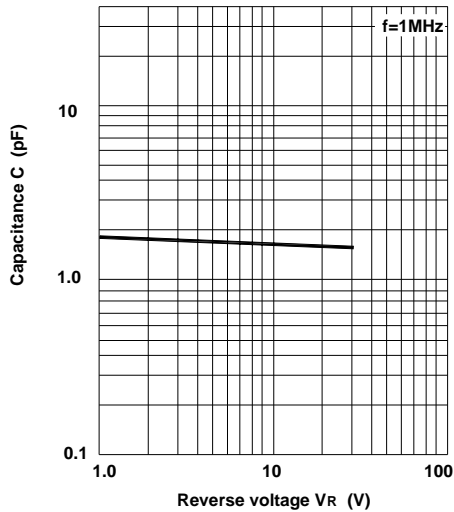


Figure 3. Typical Variation of Reverse Current at Various Temperatures

Fig.3- Capacitance Vs. Reverse voltage



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