

1SS270A

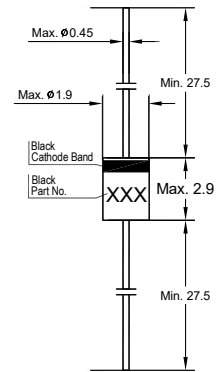
Silicon Epitaxial Planar Switching Diode

Features

- Low capacitance
- Short reverse recovery time
- High reliability

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}	70	V
Reverse Voltage	V_R	60	V
Average Forward Current	$I_{F(AV)}$	150	mA
Peak Forward Current	I_{FM}	450	mA
Non-Repetitive Peak Forward Surge Current (1 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	$^\circ\text{C}$

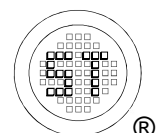
Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air ¹⁾	$R_{\theta JA}$	600	$^\circ\text{C/W}$

¹⁾ Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.

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

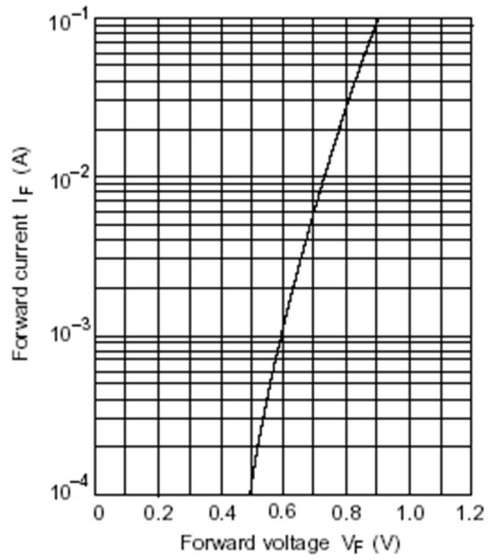
Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$	V_F	0.8	V
Reverse Current at $V_R = 60\text{ V}$	I_R	1	μA
Capacitance between Terminals at $V_R = 1\text{ V}$, $f = 1\text{ MHz}$	C_T	3	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 50\ \Omega$	t_{rr}	3.5	ns



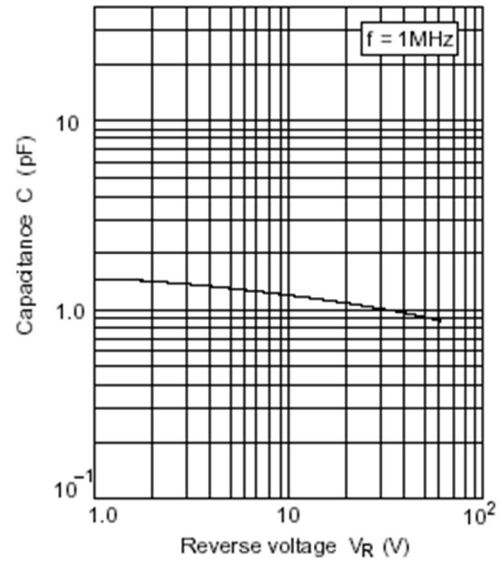
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Electrical Characteristics Curves

Forward current Vs. Forward voltage



Capacitance Vs. Reverse voltage



Power Derating Curve

