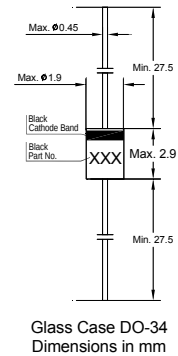


1N4531, 1N4532

Silicon Epitaxial Planar Switching Diode

Applications

- High-speed switching



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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Continuous Reverse Voltage	V_R	75	V
Continuous Forward Current	I_F	200	mA
Repetitive Peak Forward Current	I_{FRM}	450	mA
Non-repetitive Peak Forward Current	I_{FSM}	at $t = 1\ \mu\text{s}$ 4	A
		at $t = 1\ \text{ms}$ 1	
		at $t = 1\ \text{s}$ 0.5	
Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	200	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 200	$^\circ\text{C}$

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

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 10\ \text{mA}$	V_F	1	V
Reverse Current	I_R	25	nA
at $V_R = 20\ \text{V}$			
at $V_R = 50\ \text{V}$		100	nA
at $V_R = 20\ \text{V}, T_j = 150^\circ\text{C}$		50	μA
at $V_R = 50\ \text{V}, T_j = 150^\circ\text{C}$	I_R	100	μA
Diode Capacitance	C_d	4	pF
at $V_R = 0, f = 1\ \text{MHz}$			
Reverse Recovery Time	t_{rr}	4	ns
at $I_F = 10\ \text{mA}, I_R = 60\ \text{mA}, R_L = 100\ \Omega$			
		2	ns
at $I_F = 10\ \text{mA}, I_R = 10\ \text{mA}, R_L = 100\ \Omega$	t_{rr}	4	ns

