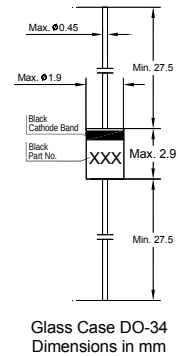


1N4531, 1N4532

Silicon Epitaxial Planar Switching Diode

Applications

- High-speed switching

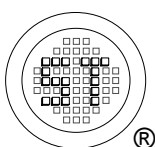


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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}	4	A
at $t = 1 \mu\text{s}$		1	
at $t = 1 \text{ ms}$		0.5	
at $t = 1 \text{ s}$			
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 at $V_R = 0, f = 1 \text{ MHz}$	C_d	4	pF
		2	pF
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



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