

Silicon Epitaxial Planar Low Leakage Diode

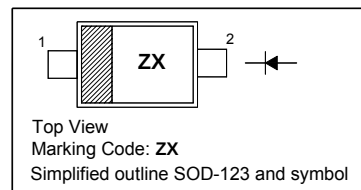
For low leakage current applications

Feature

- Very low leakage current
- Medium speed switching times

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	130	V
Continuous Forward Current	I_{FM}	215	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	4 1 0.5	A
Power Dissipation	P_D	250	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	130	-	V
Forward Voltage at $I_F = 1 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 50 \text{ mA}$ at $I_F = 150 \text{ mA}$	V_F	- - - -	0.9 1 1.1 1.25	V
Reverse Current at $V_R = 75 \text{ V}$ at $V_R = 75 \text{ V}, T_j = 125^\circ\text{C}$	I_R	- -	5 80	nA
Total Capacitance at $V_R = 0, f = 1 \text{ MHz}$	C_T	-	5	pF
Reverse Recovery Time at $I_F = I_R = 10 \text{ mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$	t_{rr}	-	3	μs

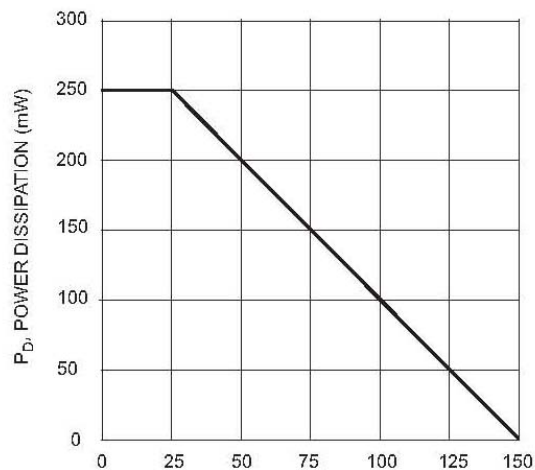


Fig. 1 Power Derating Curve

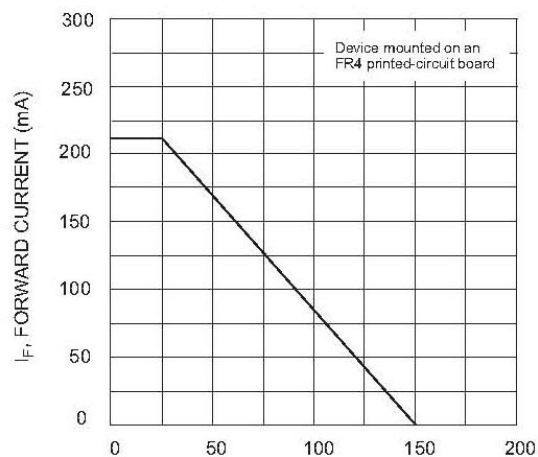


Fig. 2 Current Derating Curve

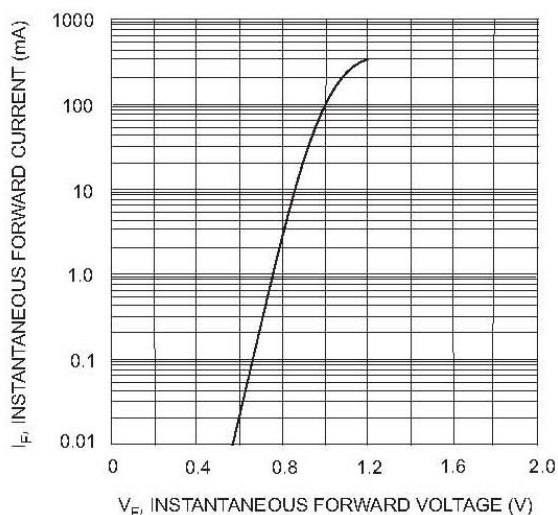


Fig. 3 Typical Forward Characteristics

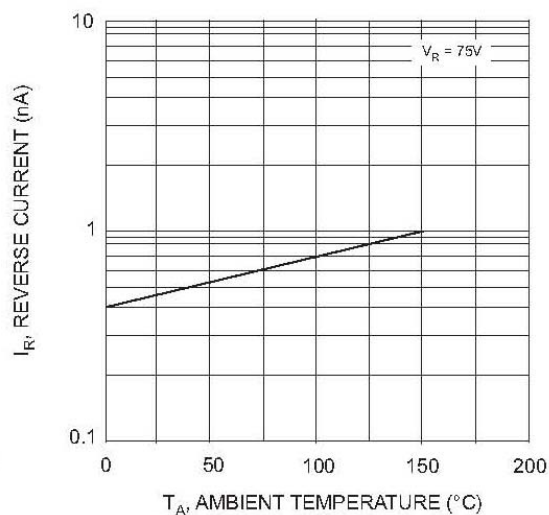


Fig. 4 Typical Reverse Characteristics