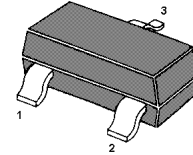
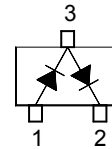


Silicon Epitaxial Planar Diode

Low leakage switching double diode
For low leakage current applications

Feature

- Very low leakage current
- Medium speed switching times
- Series pair configuration



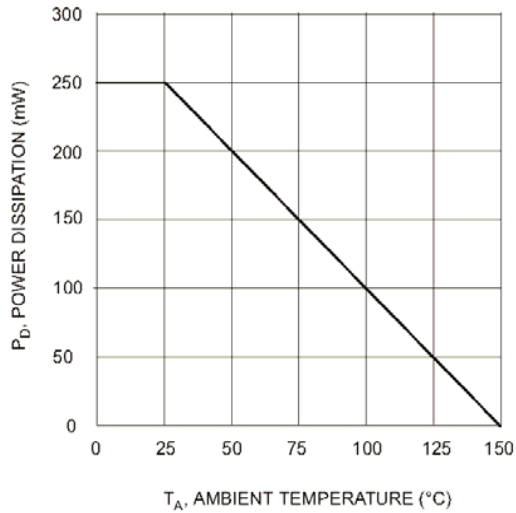
Marking Code: **PX**
SOT-23 Plastic Package

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

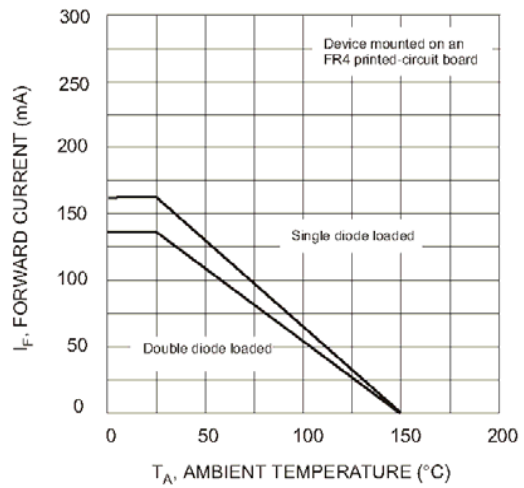
Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	85	V
Continuous Reverse Voltage	V_R	85	V
Continuous Forward Current	I_F	160 140	mA
		Single Diode Double Diode	
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	4 1 0.5	A
		at $t = 1\text{ }\mu\text{s}$ at $t = 1\text{ ms}$ at $t = 1\text{ s}$	
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 ($T_a = 25\text{ }^\circ\text{C}$)

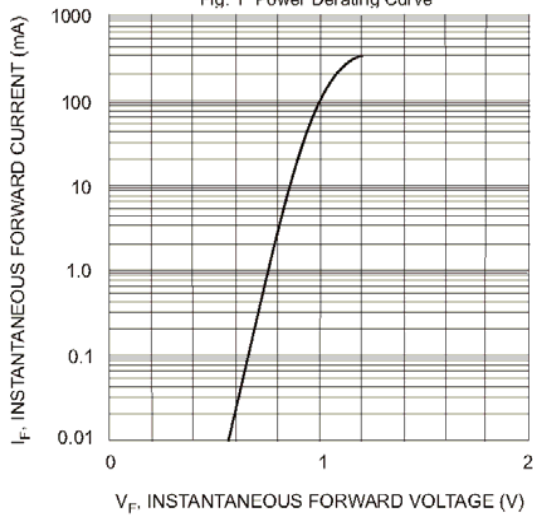
Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	85	-	-	V
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 50\text{ mA}$ at $I_F = 150\text{ mA}$	V_F	- - - -	- - - -	0.9 1 1.1 1.25	V
Reverse Current at $V_R = 75\text{ V}$ at $V_R = 75\text{ V}, T_j = 150\text{ }^\circ\text{C}$	I_R I_R	- -	- -	5 80	nA
Total Capacitance at $V_R = 0, f = 1\text{ MHz}$	C_T	-	2	-	pF
Reverse Recovery Time at $I_F = I_R = 10\text{ mA}, I_{tr} = 0.1 \times I_R, R_L = 100\text{ }\Omega$	t_{rr}	-	-	3	μs



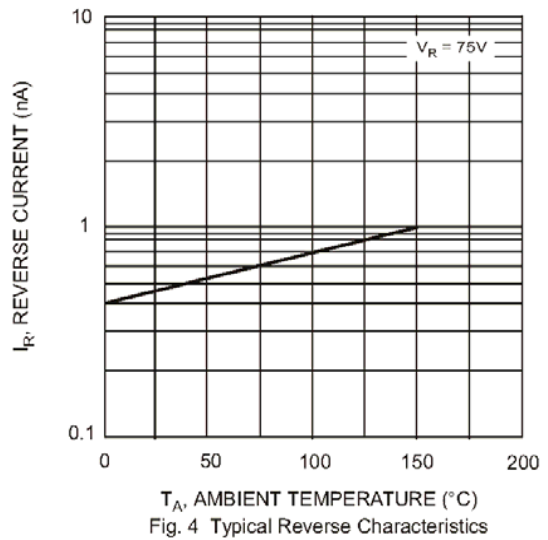
T_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Power Derating Curve



T_A , AMBIENT TEMPERATURE (°C)
Fig. 2 Current Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 3 Typical Forward Characteristics

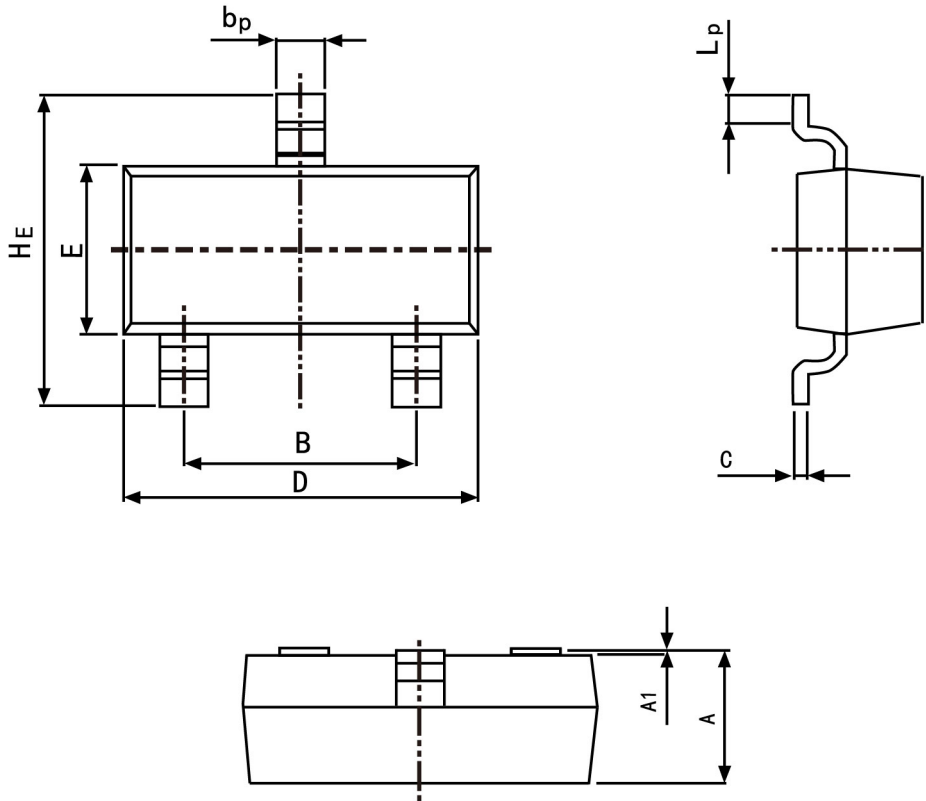


T_A , AMBIENT TEMPERATURE (°C)
Fig. 4 Typical Reverse Characteristics

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



Symbol	Dimension in Millimeters	
	Min	Max
A	0.95	1.40
B	1.78	2.04
bp	0.35	0.50
C	0.08	0.19
D	2.70	3.10
E	1.20	1.65
HE	2.20	3.00
A1	0.100	0.013
Lp	0.20	0.50