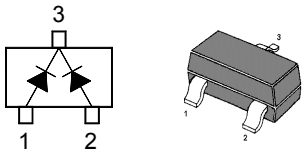
Silicon Epitaxial Planar Diodes

High voltage switching diode



MARKING:KT6

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	250	V
Reverse Voltage	V_R	200	V
Forward Current	$I_{F(AV)}$	400	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current at t = 10 ms at t = 100 µs at t = 1 µs	I_{FSM}	1.7 3 9	A
Power Dissipation	P_{tot}	350	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	357	°C/W
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	°C

Characteristics at T_a = 25 °

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 100 µA	$V_{(BR)R}$	250	-	V
Forward Voltage at I_F = 100 mA at I_F = 200 mA	V_F	- -	1 1.25	V
Reverse Current at V_R = 200 V, T_j = 25 °C at V_R = 200 V, T_j = 150 °C	I_R	- -	100 100	nA µA
Total Capacitance at V_R = 0 V, f = 1 MHz	C_{tot}	-	5	pF
Reverse Recovery Time at I_F = I_R = 30 mA, I_{rr} = 0.1 X I_R, R_L = 100 Ω	t_{rr}	-	50	ns

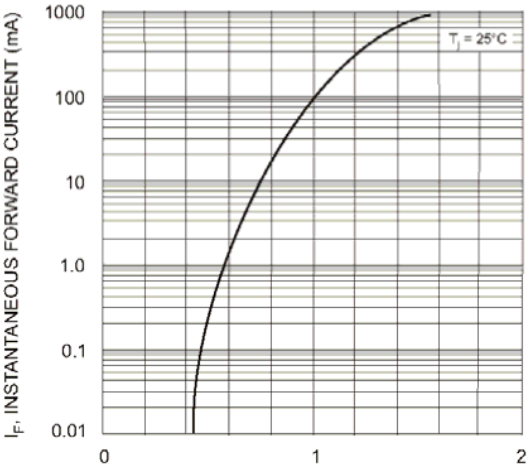


Fig. 1 Forward Characteristics

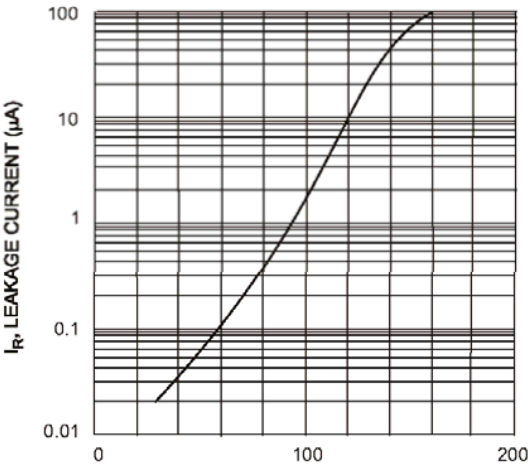
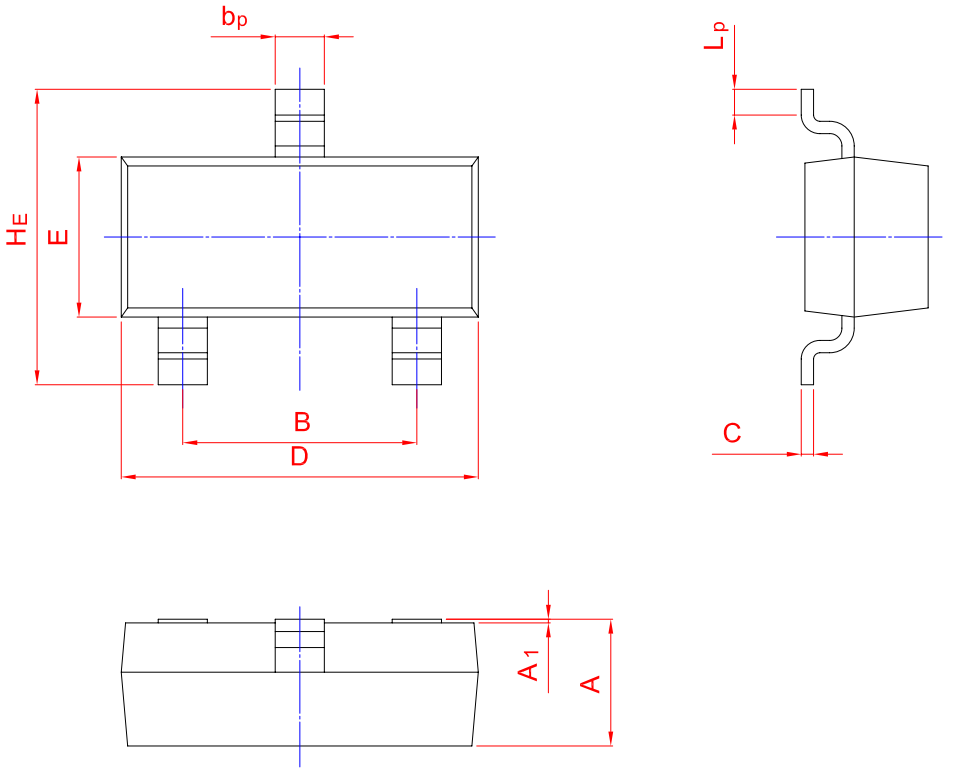


Fig. 2 Leakage Current vs Junction Temperature

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads **SOT-23**



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20