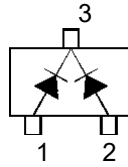


MMBD6100

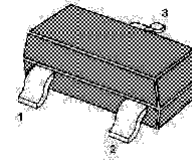
Silicon Epitaxial Planar Switching Diode

Features

- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance



Marking Code: A4



SOT-23 Plastic Package

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

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	70	V
Forward Current	I_F	200	mA
Maximum Peak Forward Current	I_{FM}	300	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	1	A
		2	
Power Dissipation	P_{tot}	300	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	417	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 1 \text{ mA}$ at $I_F = 100 \text{ mA}$	V_F	0.55	0.7	V
		0.85	1.1	
Reverse Current at $V_R = 50 \text{ V}$	I_R	-	0.1	μA
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	70	-	V
Total Capacitance at $V_R = 0$	C_T	-	2.5	pF
Reverse Recovery Time at $I_F = I_R = 10 \text{ mA}$	t_{rr}	-	4	ns

MMBD6100

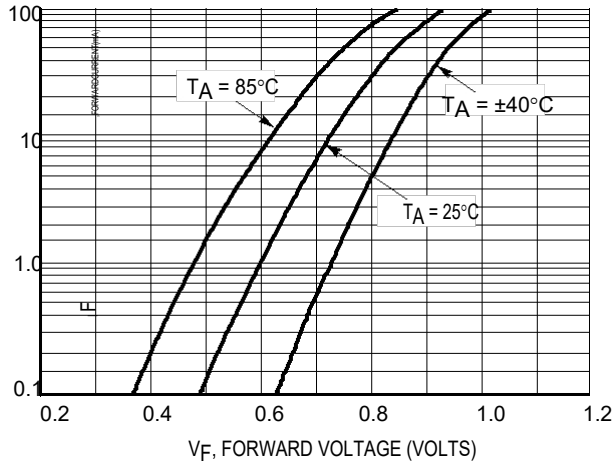


Figure 1. Forward Voltage

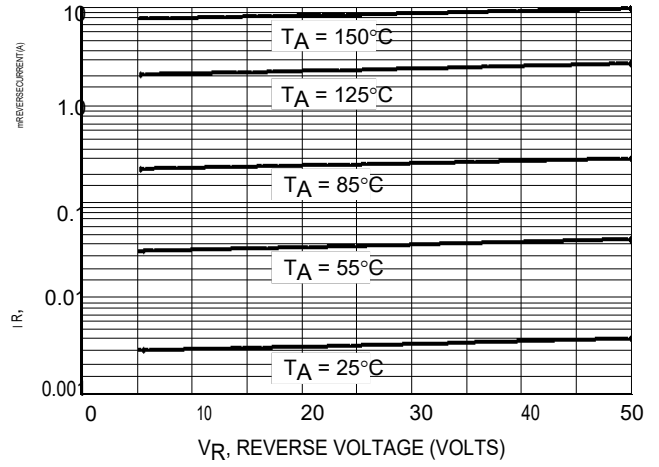


Fig e 2. Leakage Current

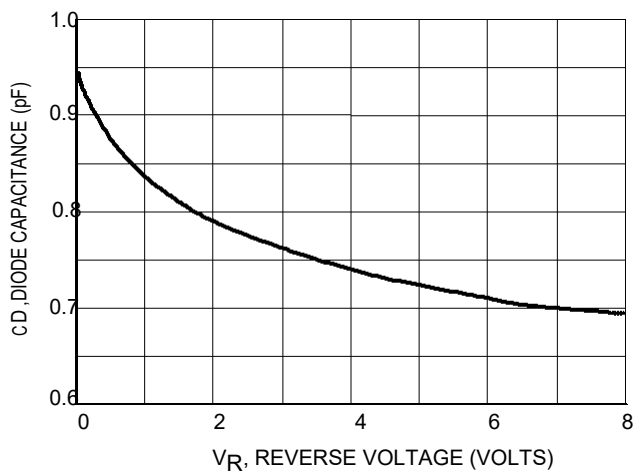
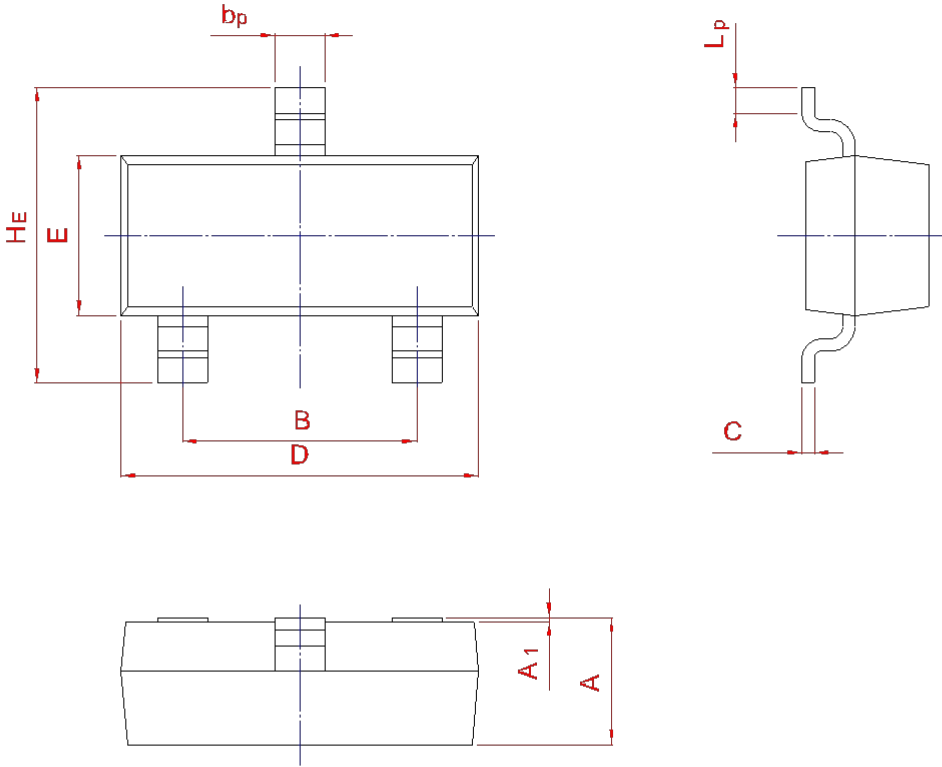
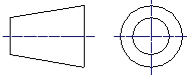


Figure 3. Capacitance

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	b _p	C	D	E	H _E	A ₁	L _p
mm	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50
	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20