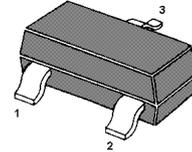
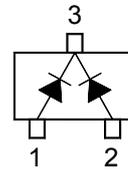


MMBD6100

Silicon Epitaxial Planar Switching Diode

Features

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



Marking Code:
SOT-23 Plastic Package

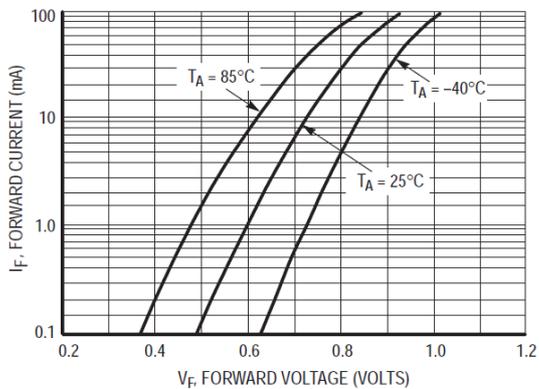
Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

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 2	A
		at $t = 1\text{ s}$ at $t = 1\text{ }\mu\text{s}$	
Power Dissipation	P_{tot}	300	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	417	$^\circ\text{C/W}$
Junction and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	$^\circ\text{C}$

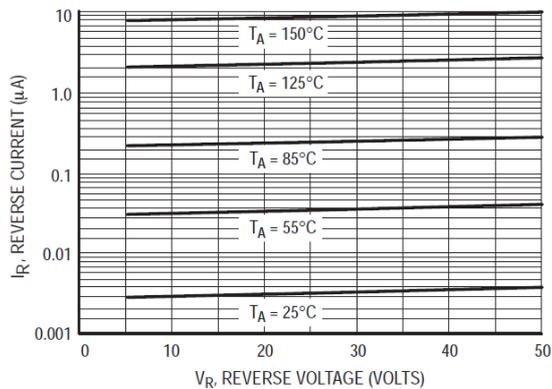
Characteristics at $T_a = 25\text{ }^\circ\text{C}$

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

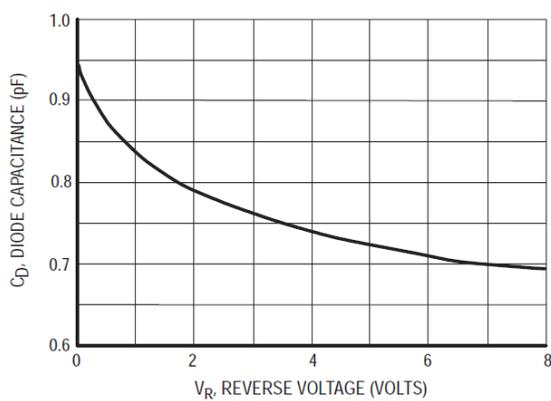
MMBD6100



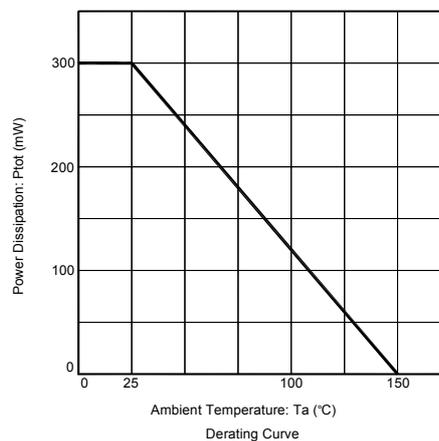
Forward Voltage



Leakage Current



Capacitance

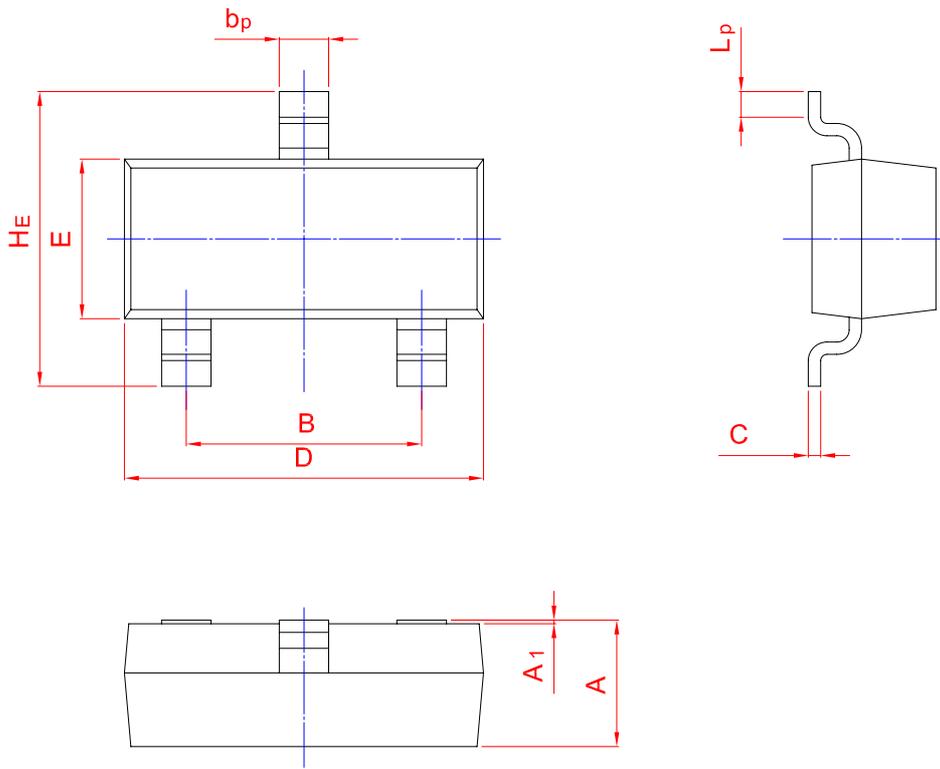
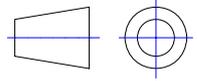


Derating Curve

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	bp	C	D	E	HE	A1	Lp
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