



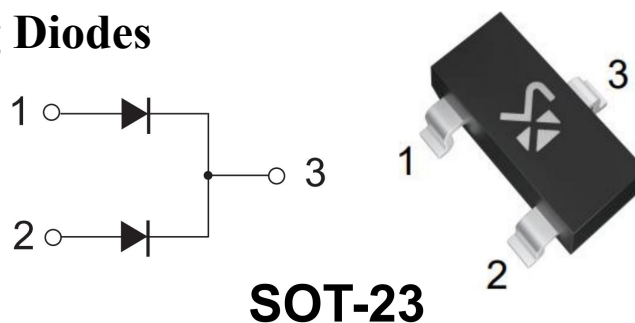
MMBD2838

Silicon Epitaxial Planar Switching Diodes

Features

- High speed switching
- Low capacitance

Marking:A61



SOT-23

Absolute Maximum Ratings@ $T_a = 25^{\circ}\text{C}$ unless otherwise specified

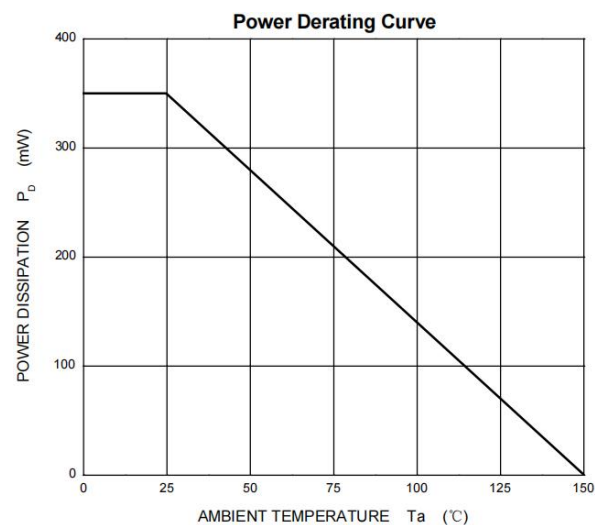
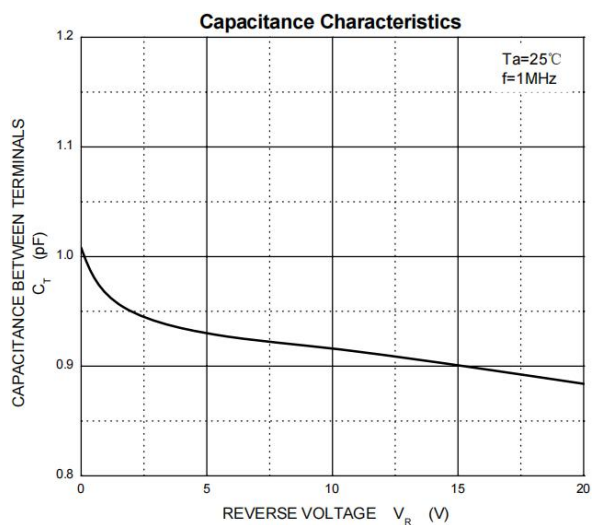
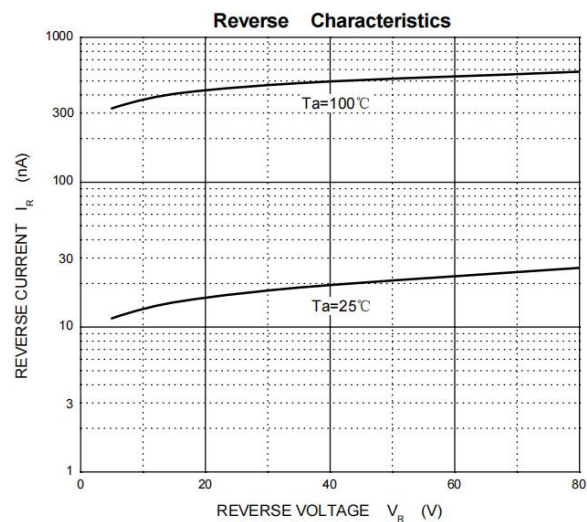
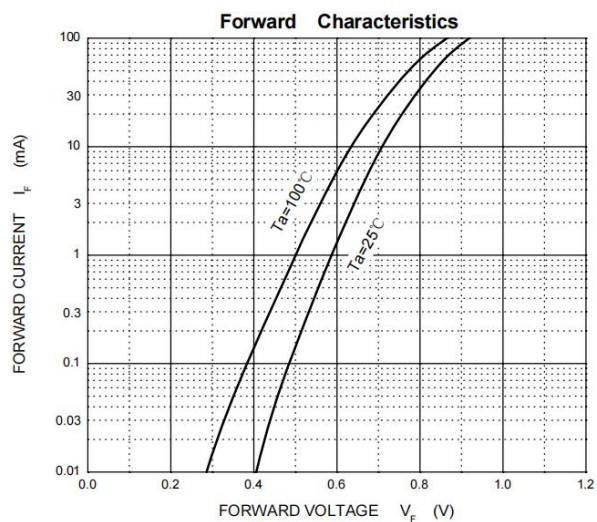
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	75	V
DC Blocking Voltage	V_R	50	V
Average Rectified Output Current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current@ $t=8.3\text{ms}$	I_{FSM}	2.0	A
Power Dissipation	P_D	350	mW
Thermal resistance From Junction to Ambient	$R_{\theta JA}$	357	$^{\circ}\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150	$^{\circ}\text{C}$

Electrical Characteristics@ $T_a = 25^{\circ}\text{C}$, unless specified otherwise

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	50			V
Forward Voltage	V_F	$I_F=10\text{mA}$		0.67	0.9	V
		$I_F=50\text{mA}$		0.75	1.0	V
		$I_F=100\text{mA}$		0.85	1.2	V
Reverse Current	I_R	$V_R=50\text{V}$			0.1	μA
Reverse Recovery Time	t_{rr}	$I_F=10\text{mA}, V_R=6\text{V}, R_L=100\Omega, I_{rr}=0.1 \cdot I_R$			3.0	ns
Capacitance Between Terminals	C_T	$V_R=0, f=1\text{MHz}$			4.0	pF



Typical Characteristics

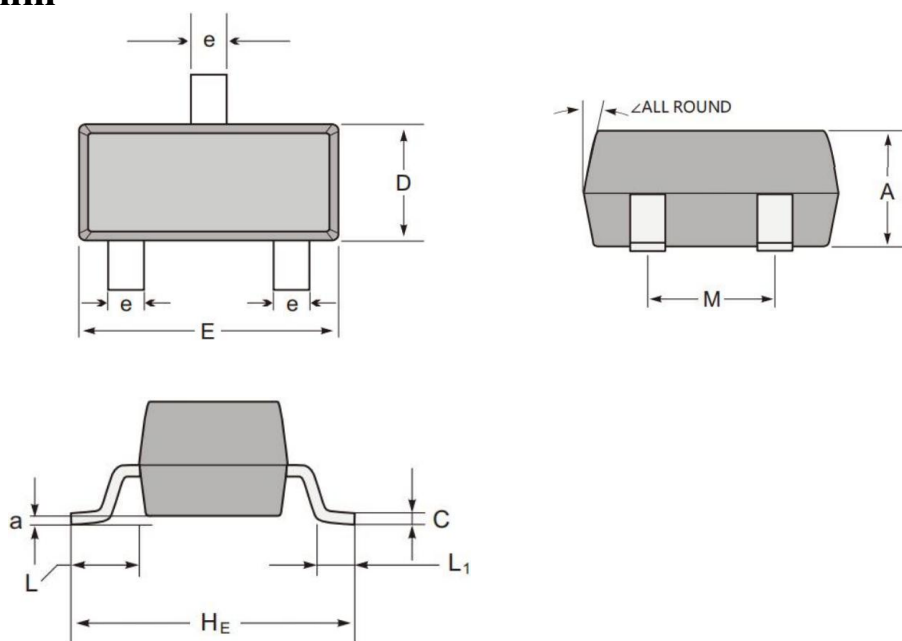




Package Information

SOT-23

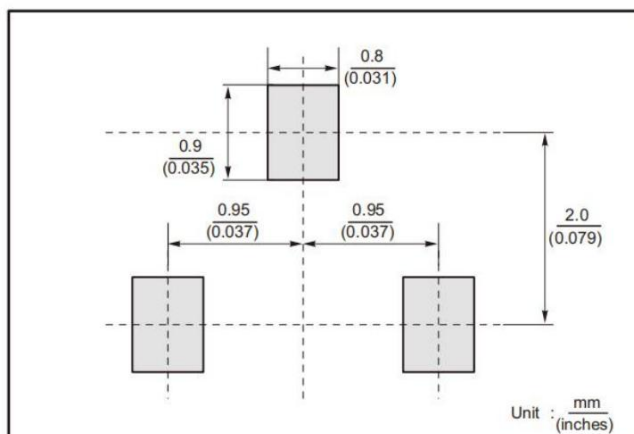
Dimensions in mm

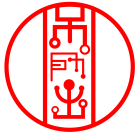


SOT-23 mechanical data

UNIT		A	C	D	E	H _E	e	M	L	L ₁	a	∠
mm	max	1.1	0.20	1.4	3.0	2.6	0.6	1.95	0.55 (ref)	0.36 (ref)	0.15	12°
	min	0.9	0.08	1.2	2.8	2.2	0.35	1.7			0.0	
mil	max	43	7.9	55	118	102	24	77	22 (ref)	14 (ref)	6	
	min	35	3.1	47	110	87	13	67			0.0	

The recommended mounting pad size





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