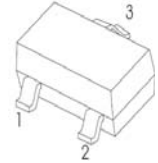
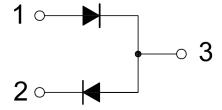




MMBD7000 SWITCHING DIODE

FEATURES

- Dual Switching Diode
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications



MARKING: M5C

SOT-23

Maximum Ratings@Ta=25

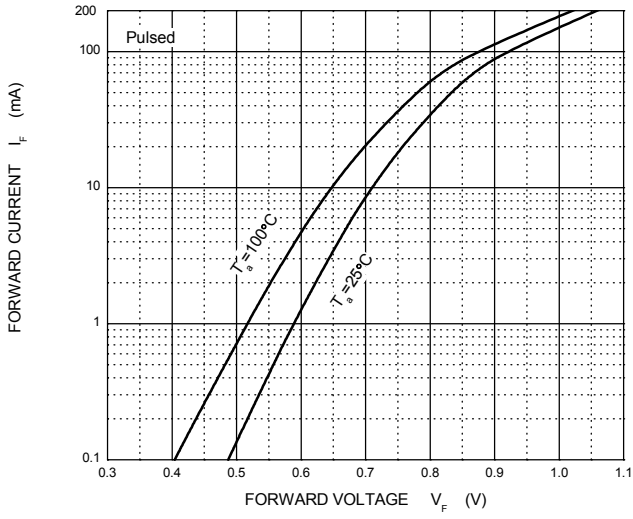
Parameter	Symbol	Limits	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Average Rectified Output Current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @ t =8.3 ms	I_{FSM}	2	A
Power Dissipation	P_D	225	mW
Thermal Resistance,Junction to Ambient	$R_{\theta JA}$	556	°C/W
Junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

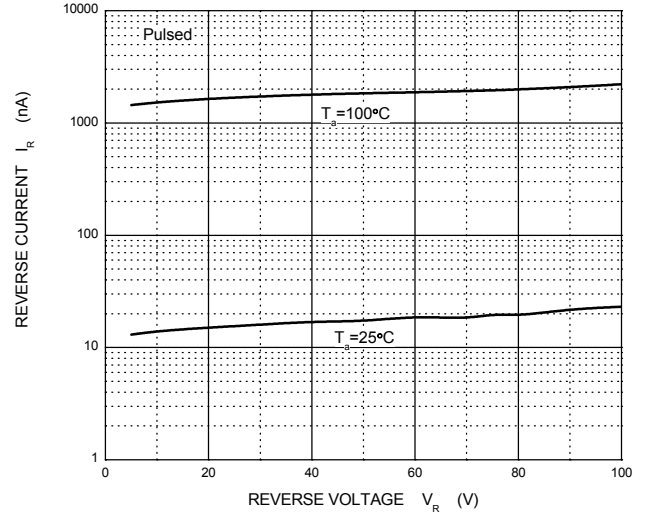
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	100		V
Reverse voltage leakage current	I_R	$V_R=50V$ $V_R=100V$		1.0 3.0	μA
Forward voltage	V_F	$I_F=1mA$ $I_F=10mA$ $I_F=100mA$	0.55 0.67 0.75	0.7 0.82 1.1	V
Diode capacitance	C_T	$V_R=0V, f=1.0MHz$		2	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$		4	ns



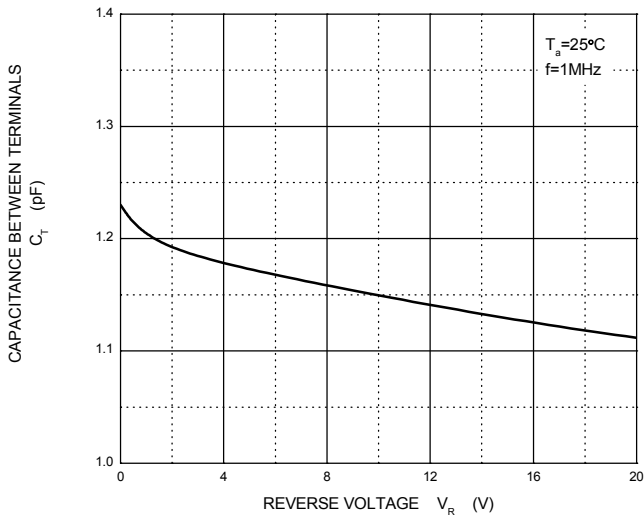
Forward Characteristics



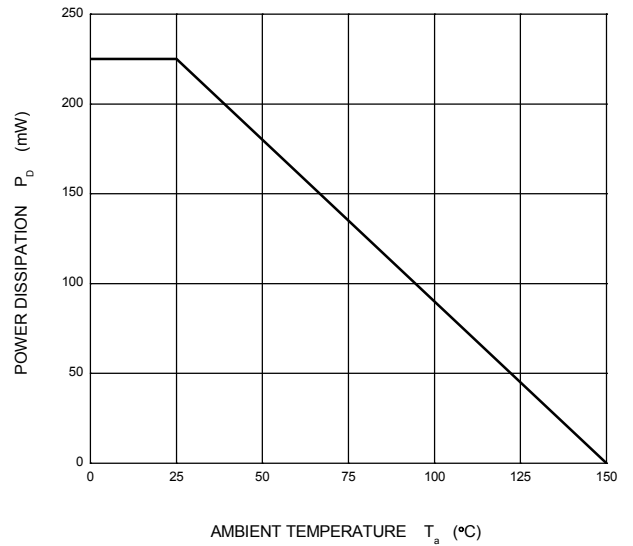
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

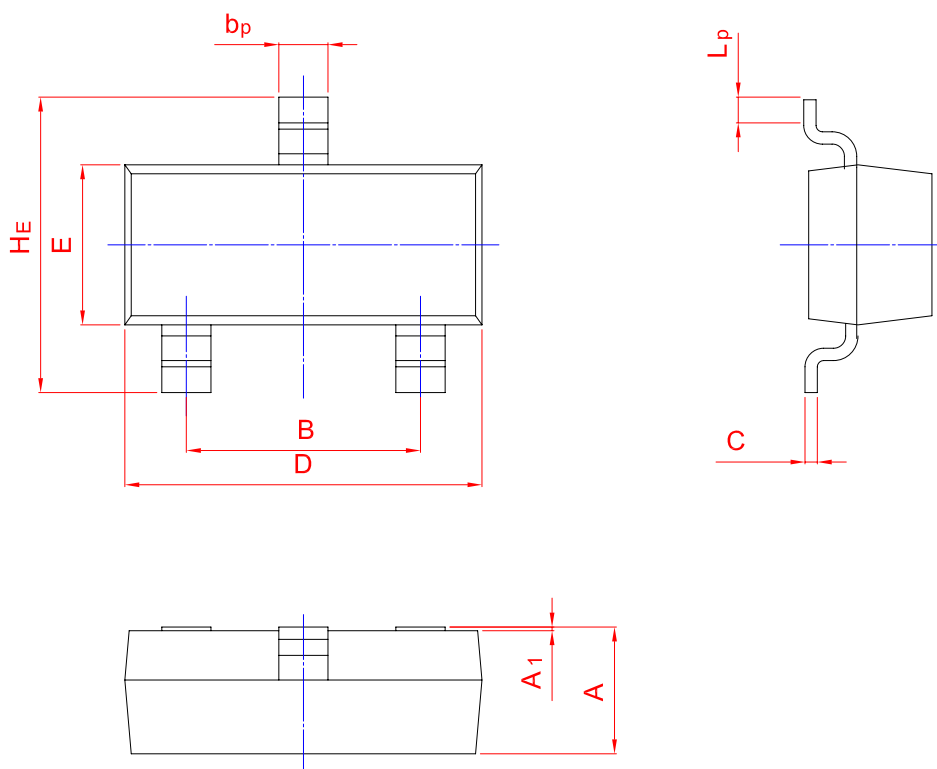
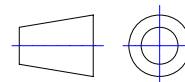




PACKAGE OUTLINE

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