

Small Signal Switching Diodes

VOLTAGE RANGE: 100V

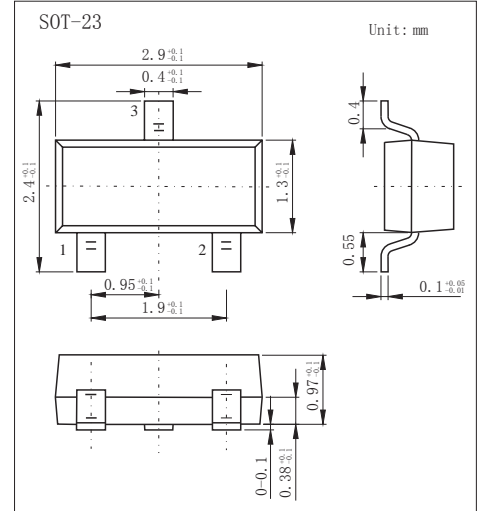
PEAK PULSE POWER: 350mW

FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

MECHANICAL DATA

- Case: SOT-23 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	72	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	P_D	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{STG}	-55~+150	°C

Electrical Specification ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)1}$	100			V	$I_R=100\mu\text{A}$
	$V_{(BR)2}$	75			V	$I_R=5\mu\text{A}$
Forward voltage	V_F			1	V	$I_F=10\text{mA}$
Reverse current	I_{R1}			5	μA	$V_R=75\text{V}$
	I_{R2}			25	nA	$V_R=25\text{V}$
Capacitance between terminals	C_T			4	pF	$V_R=0\text{V}, f=1\text{MHz}$
Reverse recovery time	t_{rr}			4	ns	$I_F=I_R=10\text{mA}, V_R=6\text{V}, I_{rr}=0.1I_R, R_L=100\Omega$

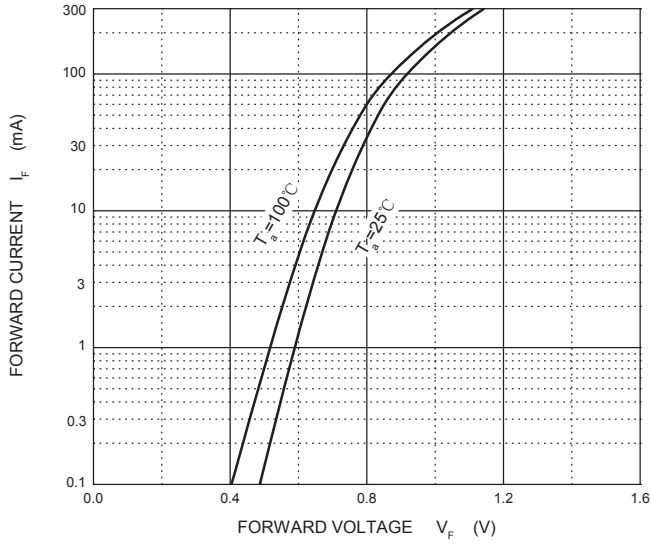
MARKING:

MMBD4148A	MMBD4148CA	MMBD4148CC	MMBD4148SE
5H	D6	D5	D4

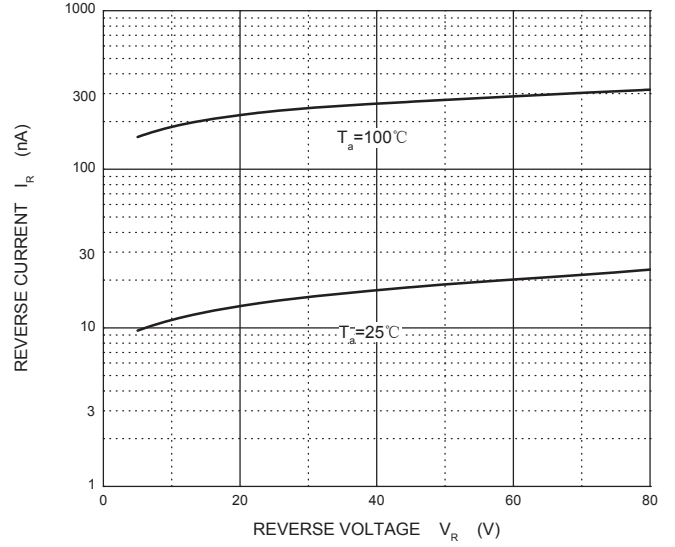


RATINGS AND CHARACTERISTIC CURVES

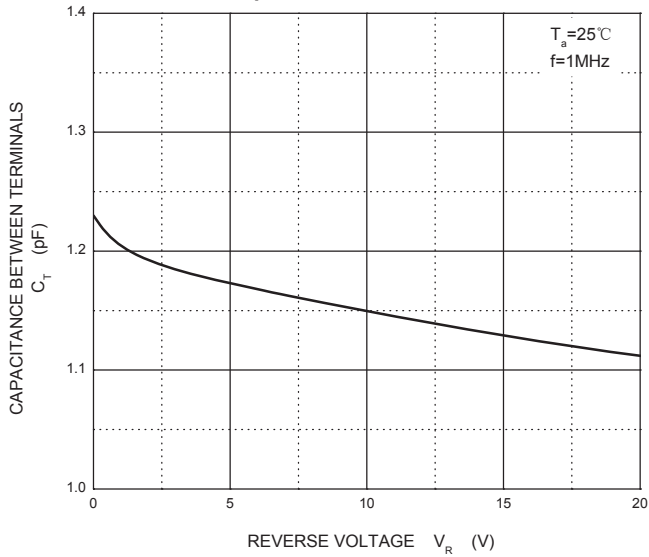
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

