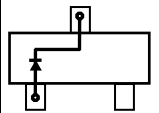
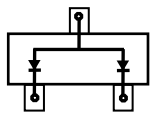
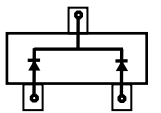
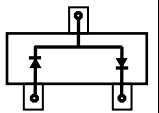


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

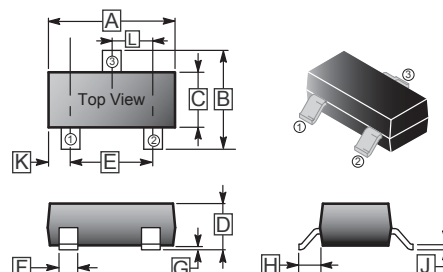
## DESCRIPTION

- Fast switching speed
- For general purpose switching applications
- High conductance

## MARKING

Part Name	MMBD248	MMBD248A	MMBD248C	MMBD248S
Marking	5H	D6	D5	D4
Circuit				

## SOT-23



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.80	3.04	G	0.09	0.18
B	2.10	2.55	H	0.45	0.60
C	1.20	1.40	J	0.08	0.177
D	0.89	1.15	K	0.6 REF.	
E	1.80	2.00	L	0.89	1.02
F	0.30	0.50			

## ABSOLUTE MAXIMUM RATINGS (Single Diode @ Ta = 25°C)

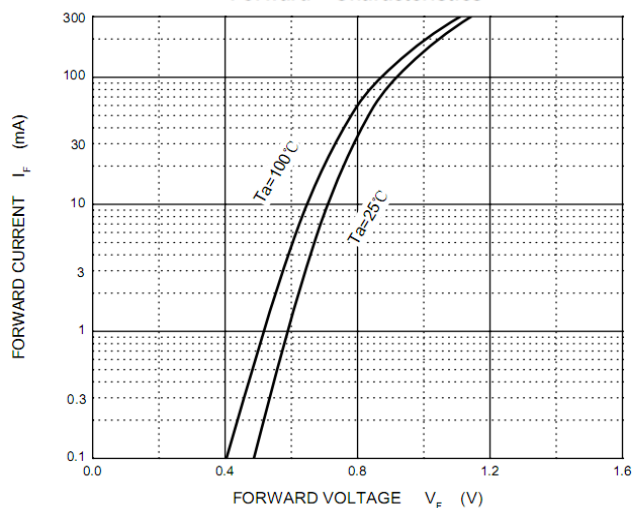
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	$I_{FM}$	300	mA
Average Rectified Output Current	$I_O$	200	mA
Peak Forward Surge Current	$I_{FSM}$	@ t = 1.0µs 2.0	A
		@ t = 1.0s 1.0	
Power Dissipation	$P_D$	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	°C / W
Storage Temperature	$T_{STG}$	150, -65 ~ 150	°C

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

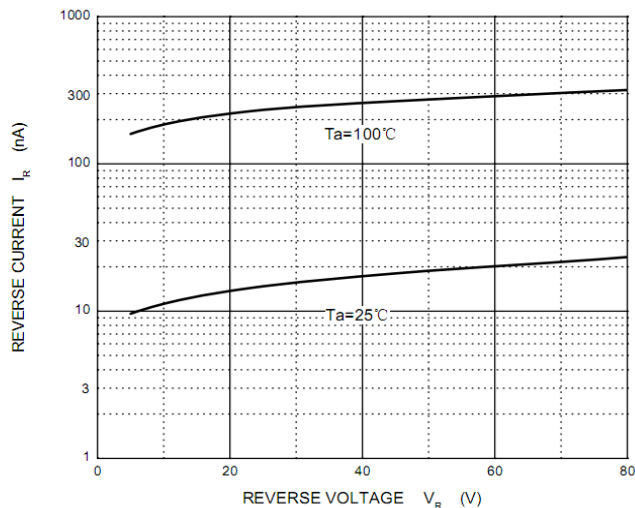
Parameters	Symbol	Min.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)R1}$	100	-	V	$I_R = 100 \mu A$
	$V_{(BR)R2}$	75	-	V	$I_R = 5 \mu A$
Forward Voltage	$V_F$	-	1	V	$I_F = 10 \text{ mA}$
Reverse Current	$I_{R1}$	-	5	µA	$V_R = 75 \text{ V}$
	$I_{R2}$	-	25	nA	$V_R = 25 \text{ V}$
Capacitance between terminals	$C_T$	-	4	pF	$V_R = 0 \text{ V}, f = 1.0 \text{ MHz}$
Reverse Recovery Time	$t_{RR}$	-	4	nS	$I_F = I_R = 10 \text{ mA}, V_R = 6 \text{ V}, I_{rr} = 0.1 I_{R1}, R_L = 100 \Omega$

**RATINGS AND CHARACTERISTIC CURVES**

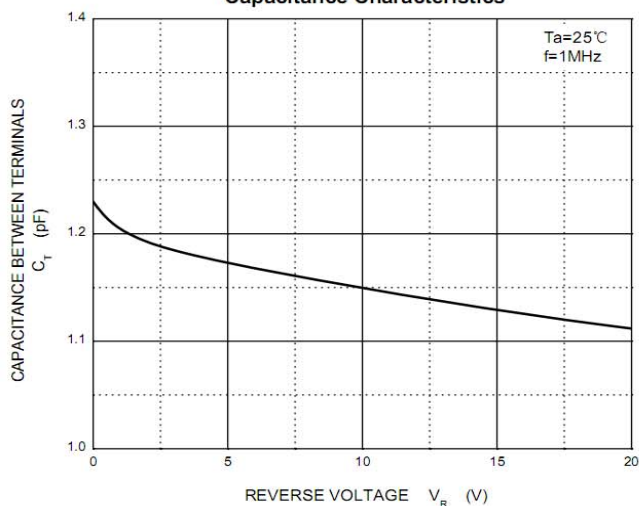
**Forward Characteristics**



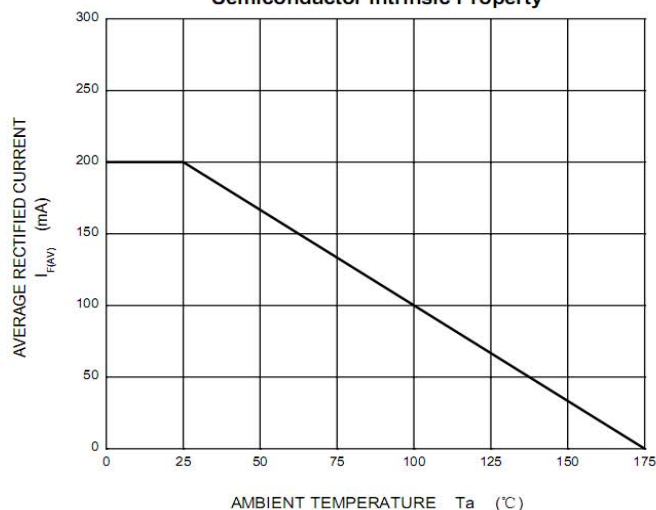
**Reverse Characteristics**



**Capacitance Characteristics**



**Semiconductor Intrinsic Property**



**Power Derating Curve**

