Elektronische Bauelemente

MMBD248/MMBD248A
MMBD248C/MMBD248S

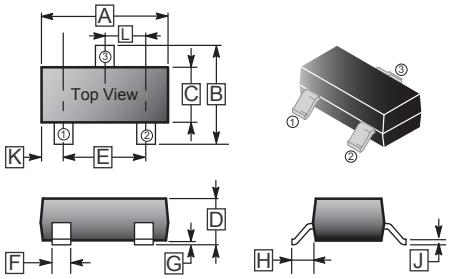
Surface Mount Small Signal Switching Diode

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

DESCRIPTION

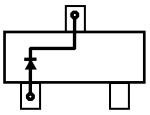
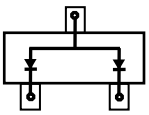
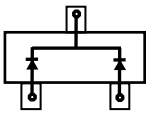
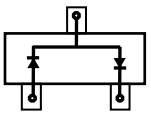
- Fast switching speed
- For general purpose switching applications
- High conductance

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			

MARKING

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

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

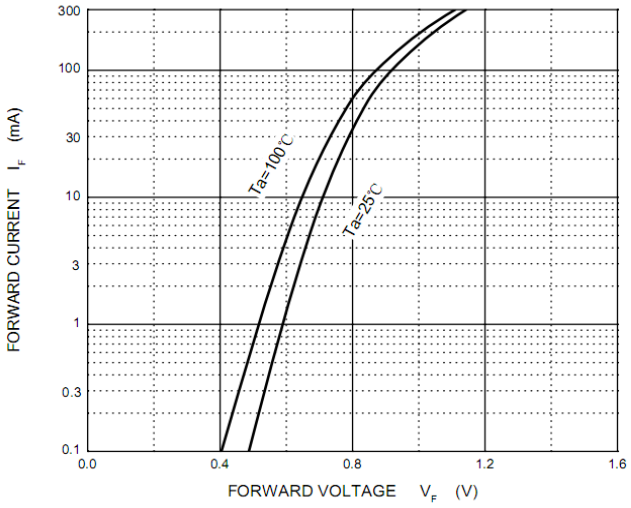
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O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

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

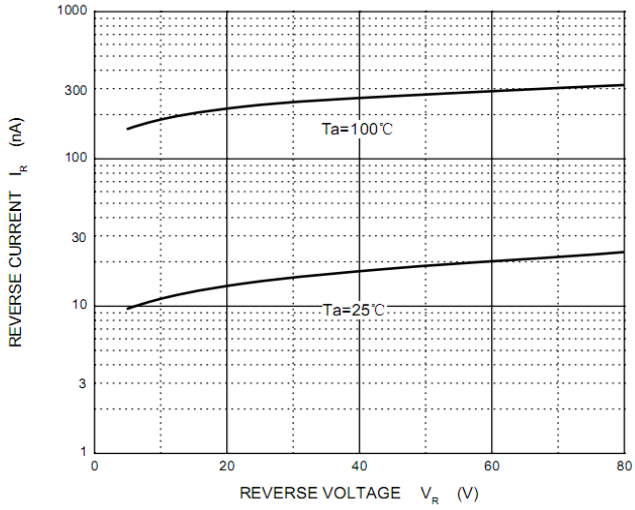
Parameters	Symbol	Min.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)R1}$	100	-	V	I_R = 100 μA
	$V_{(BR)R2}$	75	-	V	I_R = 5 μA
Forward Voltage	V_F	-	1	V	I_F = 10 mA
Reverse Current	I_{R1}	-	5	μA	V_R = 75 V
	I_{R2}	-	25	nA	V_R = 25 V
Capacitance between terminals	C_T	-	4	pF	V_R = 0 V, f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

RATINGS AND CHARACTERISTIC CURVES

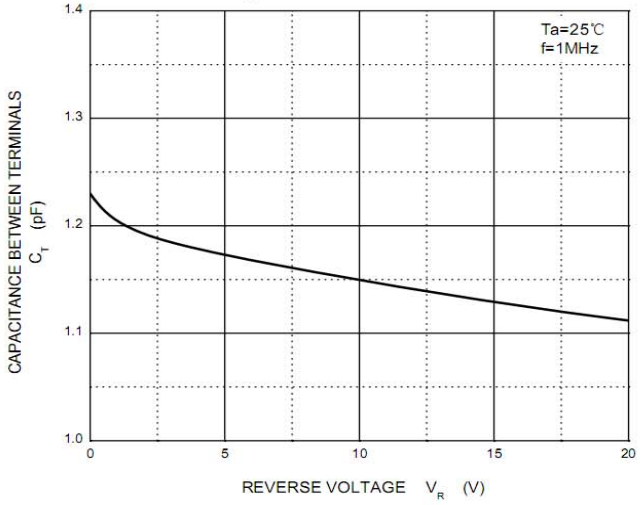
Forward Characteristics



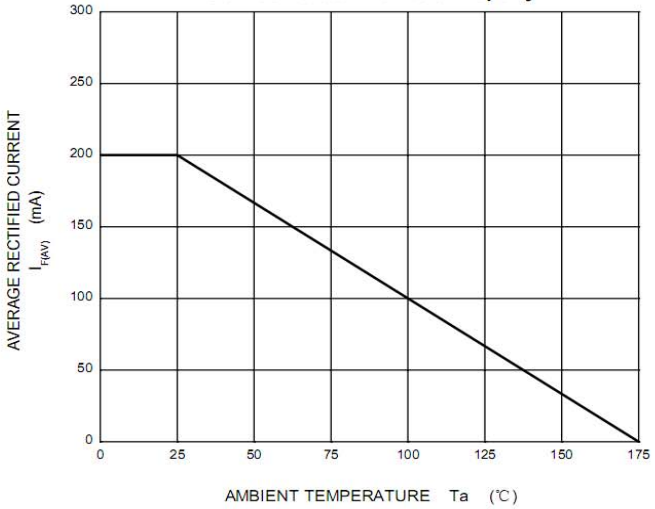
Reverse Characteristics



Capacitance Characteristics



Semiconductor Intrinsic Property



Power Derating Curve

