

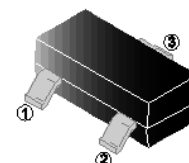
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

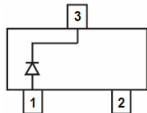
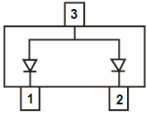
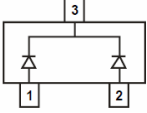
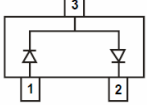
DESCRIPTION

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

SOT-23

EQUIVALENT CIRCUIT AND MARKING



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

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

ORDER INFORMATION

Part Number	Type
MMBD248 Series	Lead (Pb)-free
MMBD248 Series-C	Lead (Pb)-free and Halogen-free

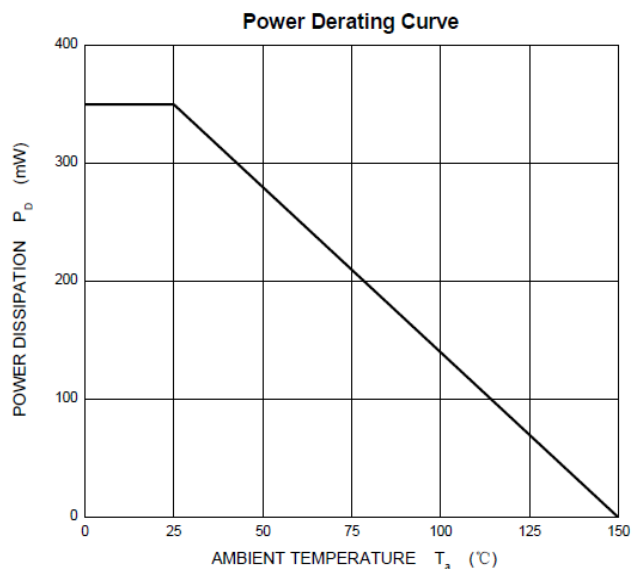
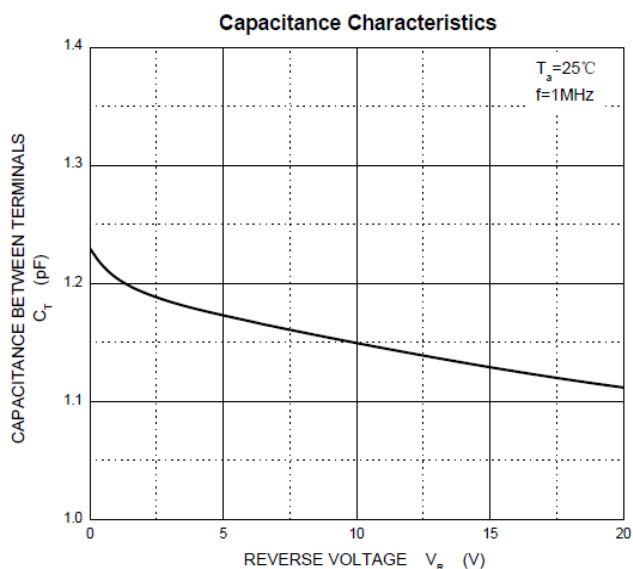
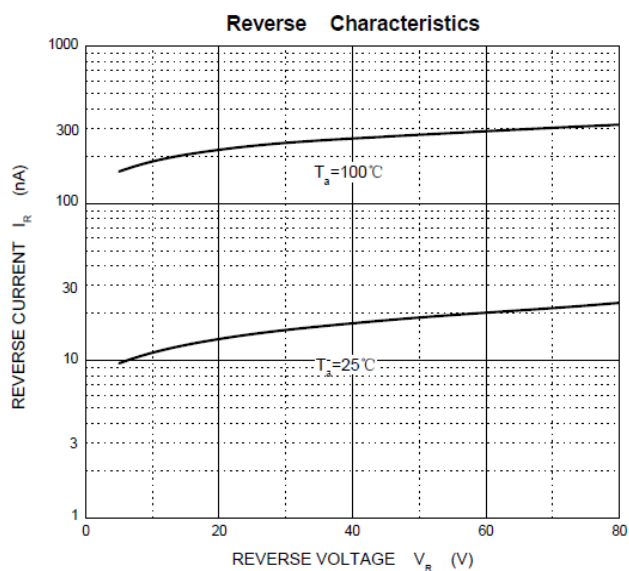
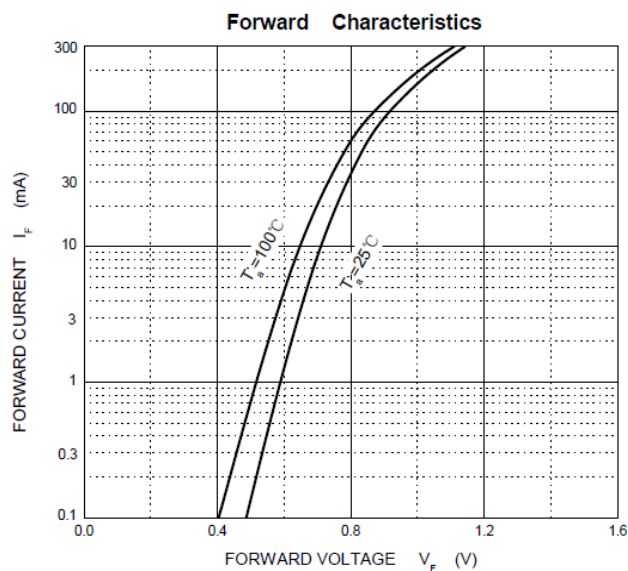
ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	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	$V_{R(RMS)}$	72	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	2	A
Power Dissipation	P_D	350	mW
Thermal Resistance Junction-Ambient	$R_{\theta JA}$	357	$^{\circ}\text{C/W}$
Operating Junction & Storage Temperature Range	T_J, T_{STG}	150, -55~150	$^{\circ}\text{C}$

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

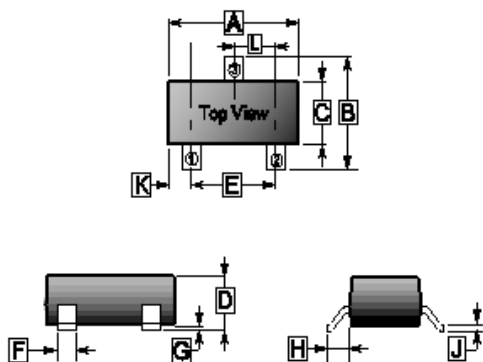
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	100	-	-	V	$I_R=100\mu\text{A}$
		75	-	-		$I_R=5\mu\text{A}$
Forward Voltage	V_F	-	-	1	V	$I_F=10\text{mA}$
Reverse Current	I_R	-	-	5	μA	$V_R=75\text{V}$
		-	-	25	nA	$V_R=25\text{V}$
Capacitance Between Terminals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

RATINGS AND CHARACTERISTIC CURVES



PACKAGE OUTLINE DIMENSIONS

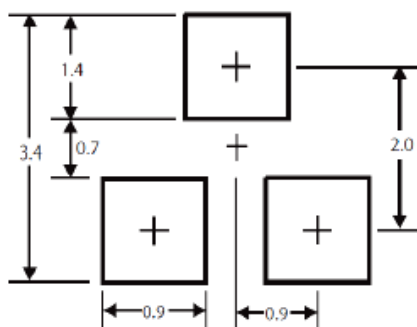
SOT-23



REF.	Millimeter	
	Min.	Max.
A	2.65	3.10
B	2.10	3.00
C	1.10	1.80
D	0.89	1.40
E	1.70	2.30
F	0.28	0.55
G	-	0.18
H	0.55 REF.	
J	0.05	0.26
K	0.60 REF.	
L	0.95 TYP.	

MOUNTING PAD LAYOUT

SOT-23



*Dimensions in millimeters