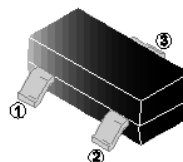


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

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

SOT-23



MARKING

5D

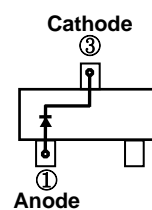
KA2

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

ORDER INFORMATION

Part Number	Type
MMBD4148-C	Lead (Pb)-free and Halogen-free



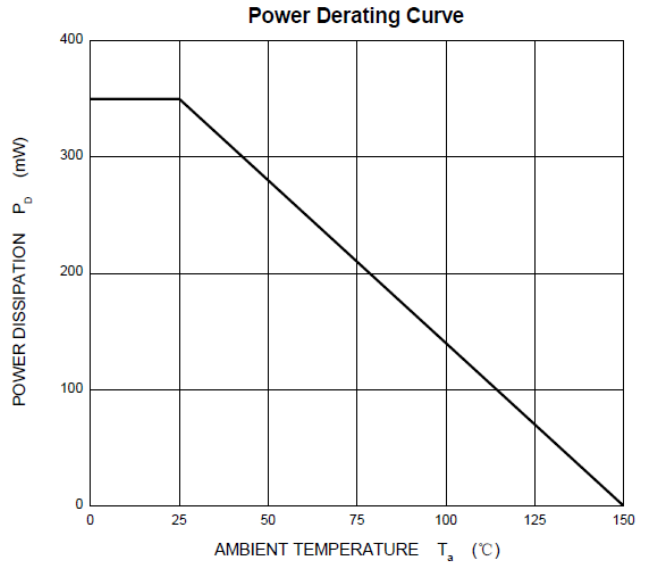
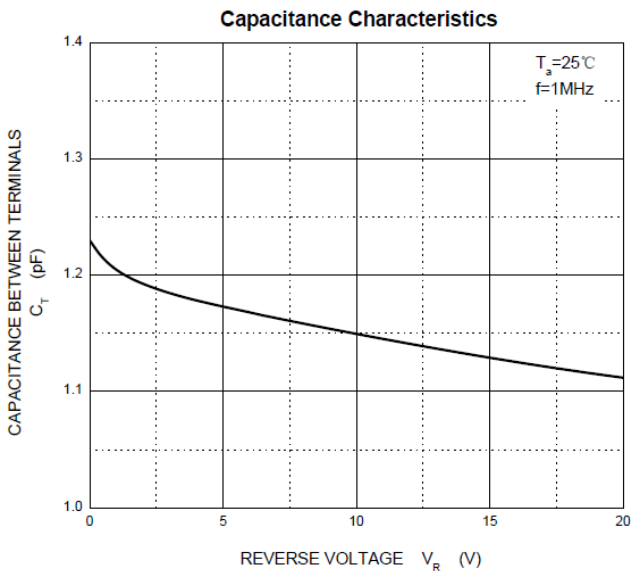
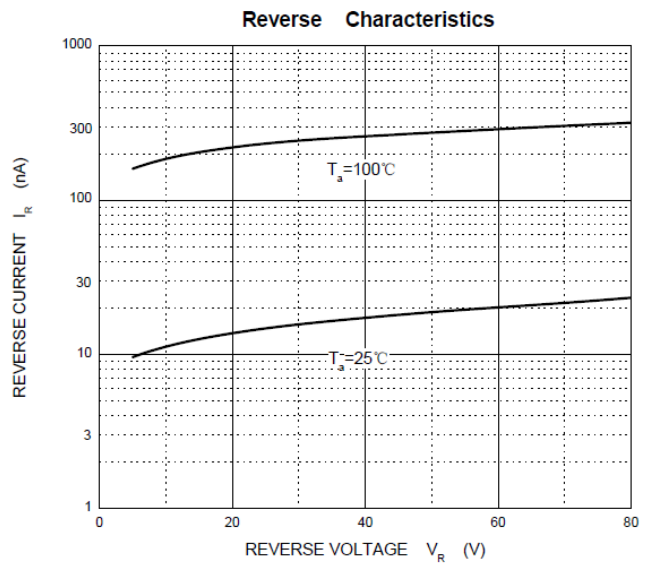
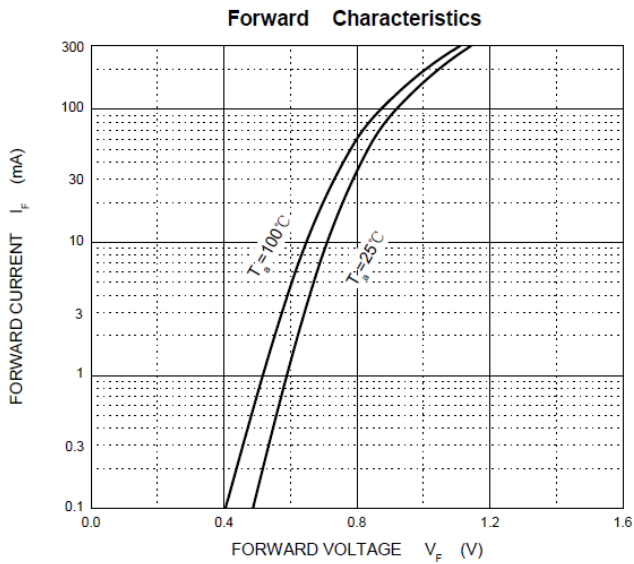
ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RPM}	75	
Working Peak Reverse Voltage	V _{RWM}	75	
DC Blocking Voltage	V _R	75	
RMS Reverse Voltage	V _{RMS}	53	
Forward Continuous Current	I _F	300	mA
Average Rectified Output Current	I _O	150	mA
Non-Repetitive Peak Forward Surge Current @ t=8.3ms	I _{FSM}	2	A
Power Dissipation	P _D	350	mW
Thermal Resistance Junction-Ambient	R _{θJA}	357	°C/W
Operation Junction, Storage Temperature Range	T _J , T _{STG}	-55~150	°C

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

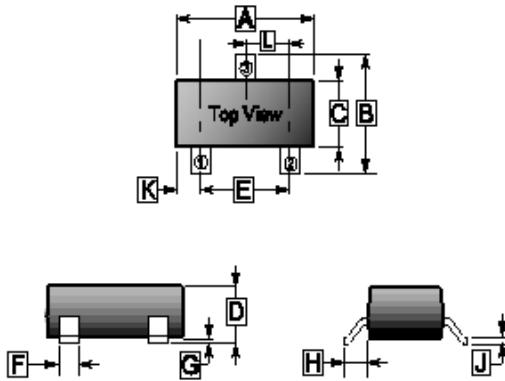
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	75	-	-	V	$I_R=100\mu\text{A}$
Forward Voltage	V_F	-	-	0.715	V	$I_F=1\text{mA}$
		-	-	0.855		$I_F=10\text{mA}$
		-	-	1		$I_F=50\text{mA}$
		-	-	1.25		$I_F=150\text{mA}$
Reverse Voltage Leakage Current	I_R	-	-	25	nA	$V_R=20\text{V}$
		-	-	2.5	μA	$V_R=75\text{V}$
Diode Capacitance	C_T	-	2	-	pF	$V_R=0, f=1\text{MHz}$
Reverse Recovery Time	T_{RR}	-	4	-	nS	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$

RATINGS AND CHARACTERISTIC CURVES



PACKAGE OUTLINE DIMENSIONS

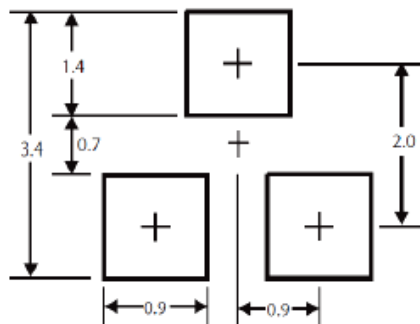
SOT-23



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