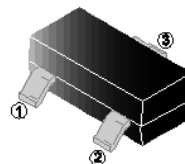


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- Low Current Leakage
- Small Outline Surface Mount Package

SOT-23



MARKING

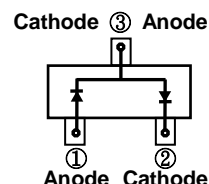
M5C

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

ORDER INFORMATION

Part Number	Type
MMBD7000-C	Lead (Pb)-free and Halogen-free



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

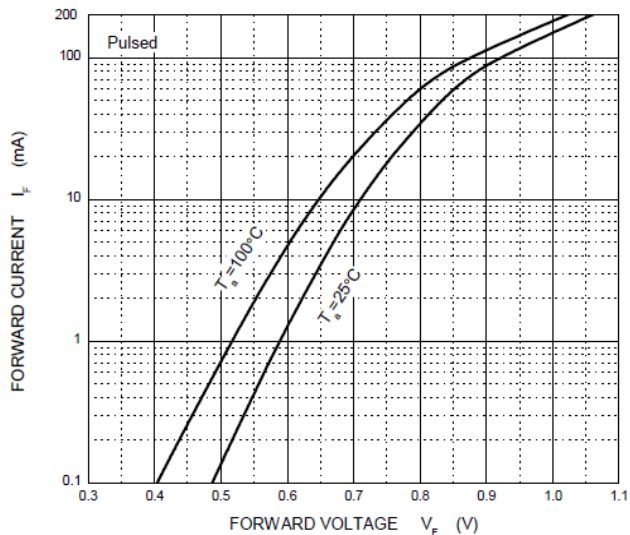
Parameter	Symbol	Ratings	Unit
Reverse Voltage	V _R	100	V
RMS Reverse Voltage	V _{RMS}	53	V
Average Rectified Output Current	I _O	0.2	A
Non-Repetitive Peak Forward Surge Current @t=1s	I _{FSM}	0.5	A
Power Dissipation	P _D	225	mW
Thermal Resistance Junction-Ambient	R _{θJA}	556	°C/W
Junction, Storage Temperature Range	T _J , T _{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

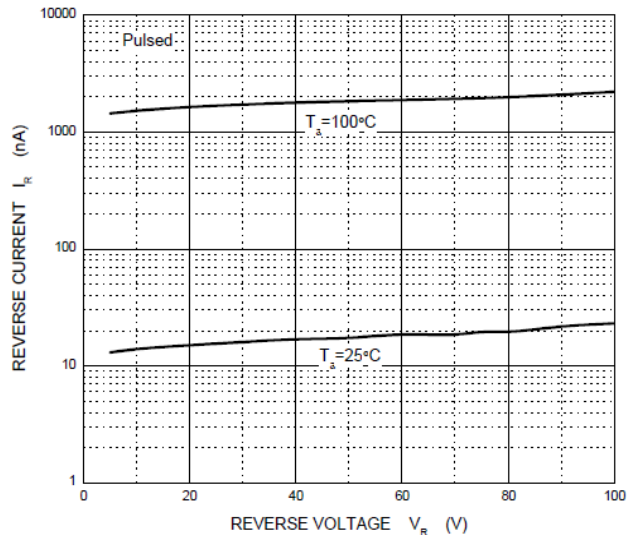
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Forward Voltage	V _F	-	-	0.855	V	I _F =10mA
		-	-	1.1		I _F =100mA
Reverse Voltage Leakage Current	I _R	-	-	1	μA	V _R =50V, T _J =25°C
		-	-	100		V _R =50V, T _J =125°C
		-	-	3		V _R =100V
Capacitance Between Terminals	C _T	-	2	-	pF	V _R =0, f=1MHz
Reverse Recovery Time	T _{rr}	-	4	-	nS	I _F =I _R =10mA, I _{rr} =0.1xI _R , R _L =100Ω

TYPICAL CHARACTERISTICS

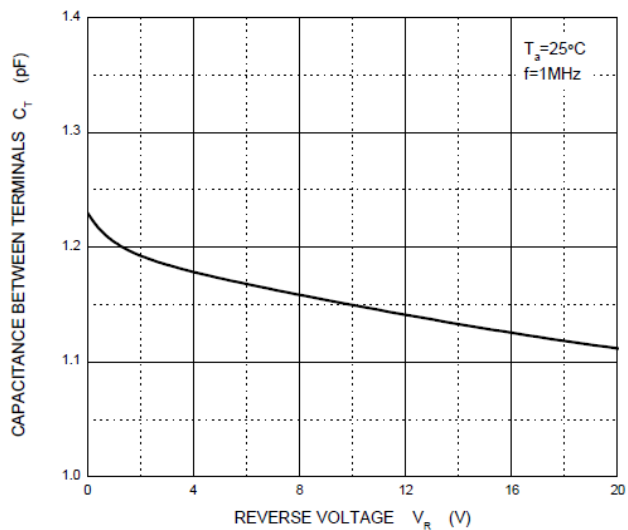
Forward Characteristics



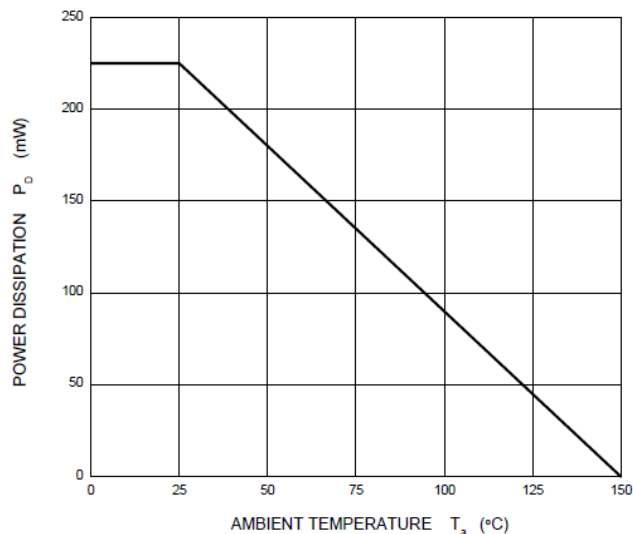
Reverse Characteristics



Capacitance Characteristics

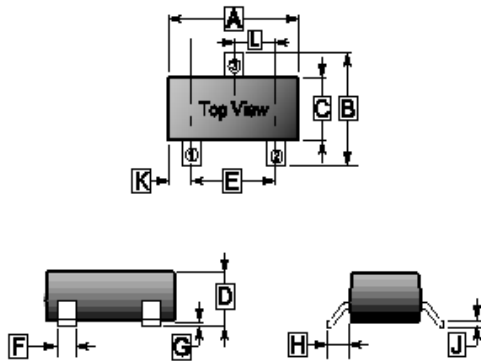


Power Derating Curve



PACKAGE OUTLINE DIMENSIONS

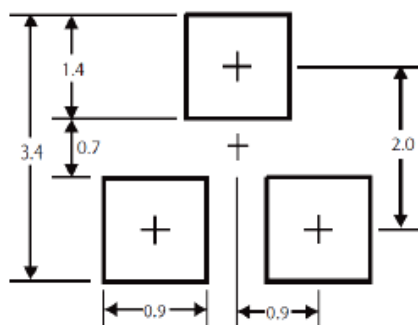
SOT-23



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