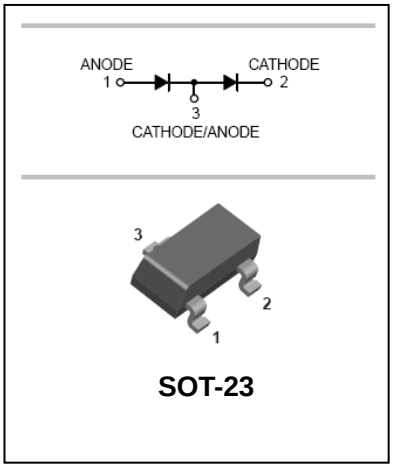
Surface mount switching diode **MMBD7000**

FEATURES

- For high-speed switching appilication.
- Connected in series.

Lead-free



SOT-23

APPLICATIONS

- High speed switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
MMBD7000	M5C	SOT-23

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Characteristic	**Symbol**	**Limits**	**Unit**
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
DC Reverse Voltage	V_R	100	V
Forward Current	I_F	200	mA
Suge forward Current, t=1μs	I_{FS}	4.5	A
Power Dissipation	P_d	330	mW
Operating Junction Temperature Range	T_j	150	℃
Storage Temperature Range	T_{STG}	-65 to +150	℃

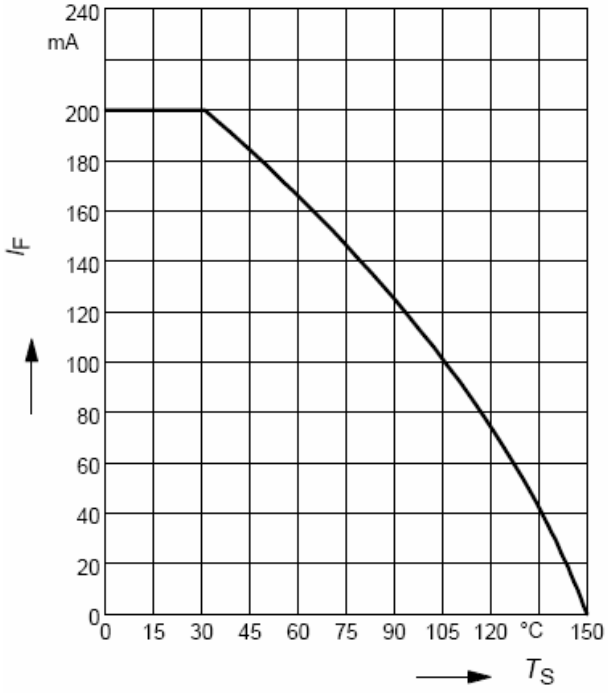
ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Characteristic	**Symbol**	**Min**	**MAX**	**UNIT**	**Test Condition**
Reverse Breakdown Voltage	$V_{(BR)R}$	100		V	I_R= 100μA
Forward Voltage	V_F	0.55 0.67 0.75	0.7 0.82 1.1	V	I_F=1mA I_F=10mA I_F=100mA
Reverse Leakage Current	I_R		300 500	nA	V_R=50V V_R=100V
Diode Capacitance	C_D		2	pF	V_R=0V,f=1MHz
Reverse Recovery Time	t_{rr}		15	ns	I_F=I_R=10mA R_L=100Ω

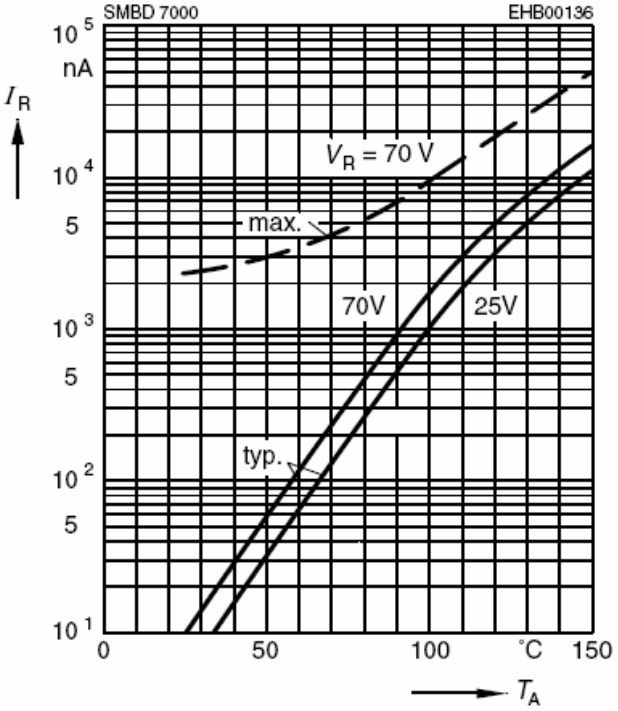
Surface mount switching diode **MMBD7000**

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

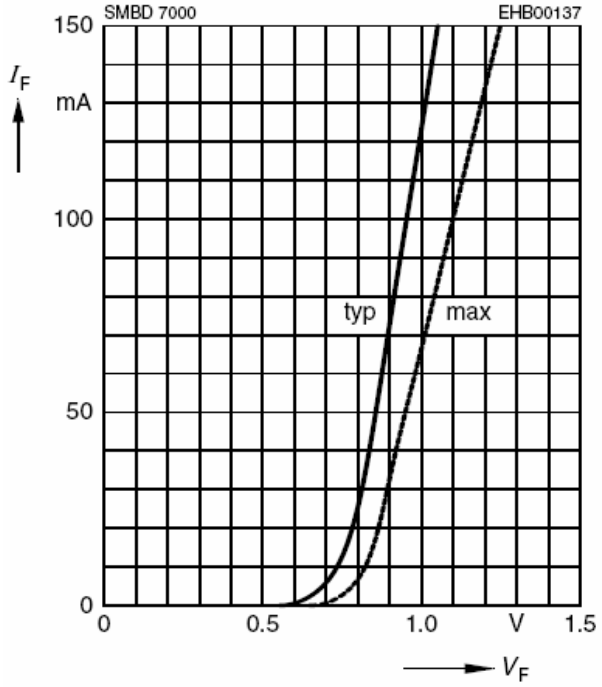
Forward current $I_F = f(T_S)$



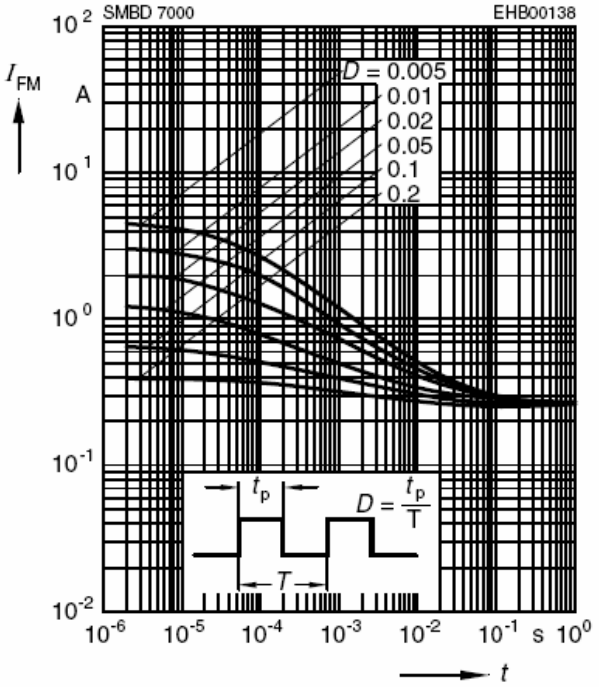
Reverse current $I_R = f(T_A)$



Forward current $I_F = f(V_F)$



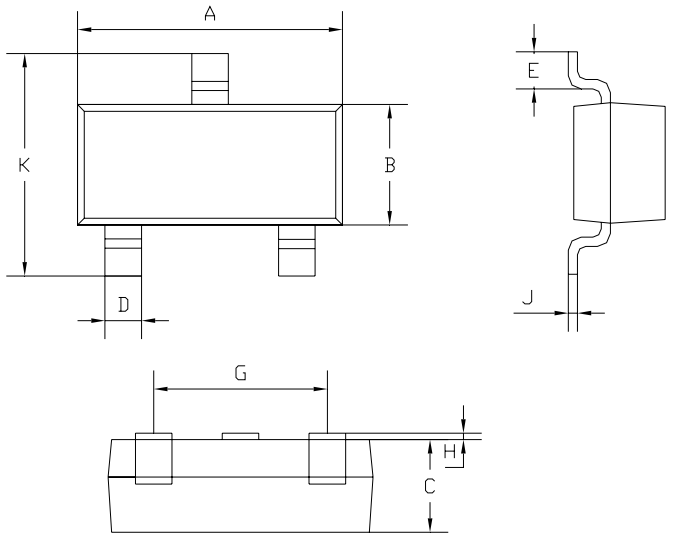
Peak forward current $I_{FM} = f(t_p)$



Surface mount switching diode **MMBD7000**

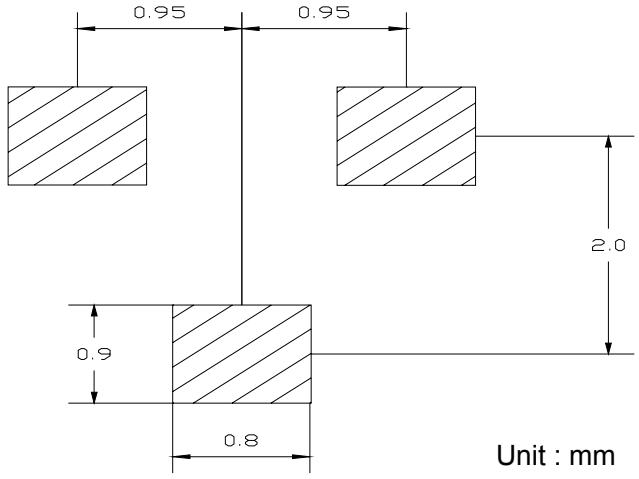
PACKAGE OUTLINE

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1Typical	
K	2.35	2.45
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
MMBD7000	SOT-23	3000/Tape&Reel