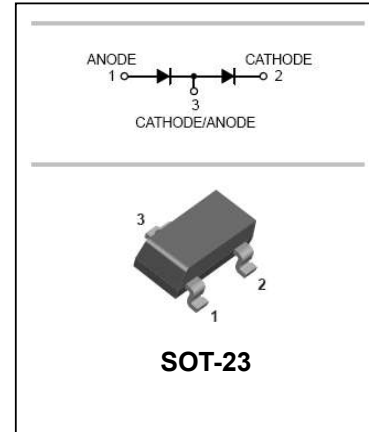


Surface mount switching diode

**MMBD7000**

**FEATURES**

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



**APPLICATIONS**

- High speed switching application.

**ORDERING INFORMATION**

Type No.	Marking	Package Code
MMBD7000	M5C	SOT-23

**MAXIMUM RATING @ Ta=25°C 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
Surge forward Current, $t=1\mu s$	$I_{FS}$	4.5	A
Power Dissipation	$P_d$	330	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	379	°C/W
Operating Junction Temperature Range	$T_j$	-65 to +150	°C
Storage Temperature Range	$T_{STG}$	-65 to +150	°C

**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

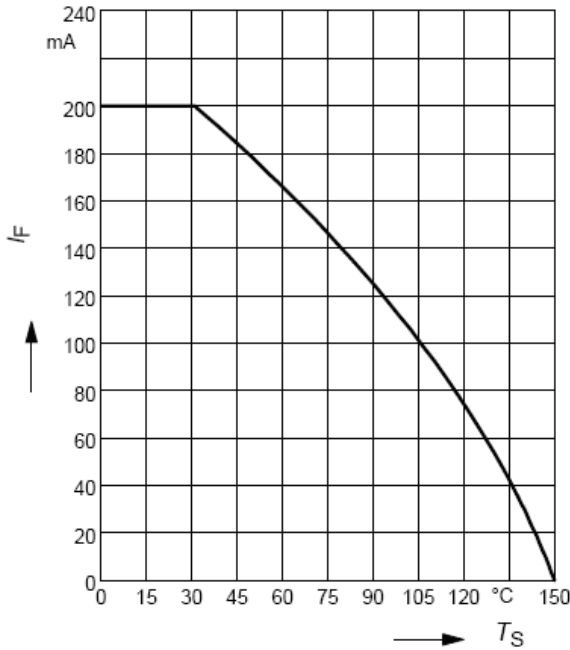
Characteristic	Symbol	Min	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	100		V	$I_R=100\mu A$
Forward Voltage	$V_F$	0.55 0.67 0.75	0.7 0.82 1.1	V	$I_F=1mA$ $I_F=10mA$ $I_F=100mA$
Reverse Leakage Current	$I_R$		300 500	nA	$V_R=50V$ $V_R=100V$
Diode Capacitance	$C_D$		2	pF	$V_R=0V, f=1MHz$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

Surface mount switching diode

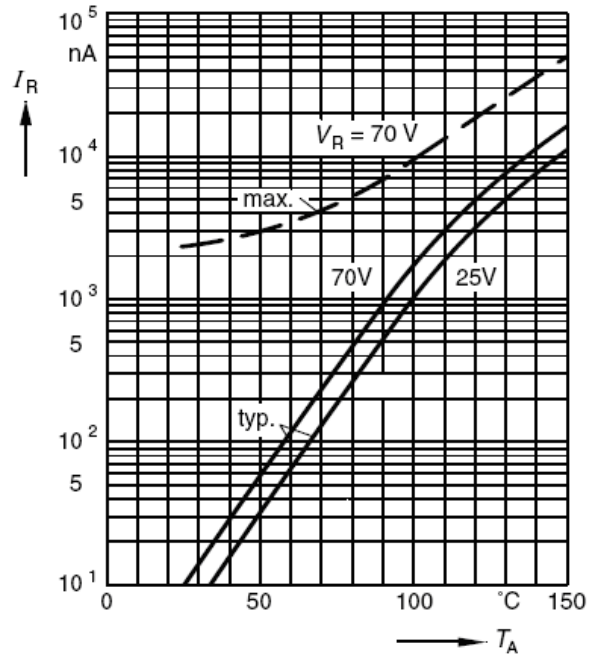
**MMBD7000**

TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified

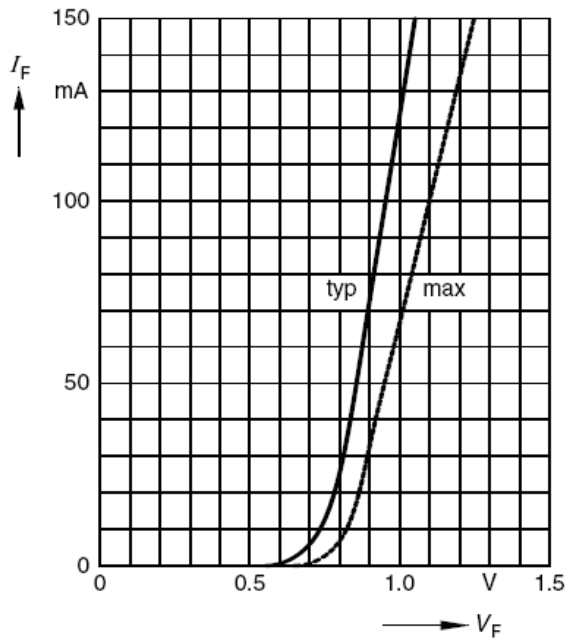
**Forward current  $I_F = f(T_S)$**



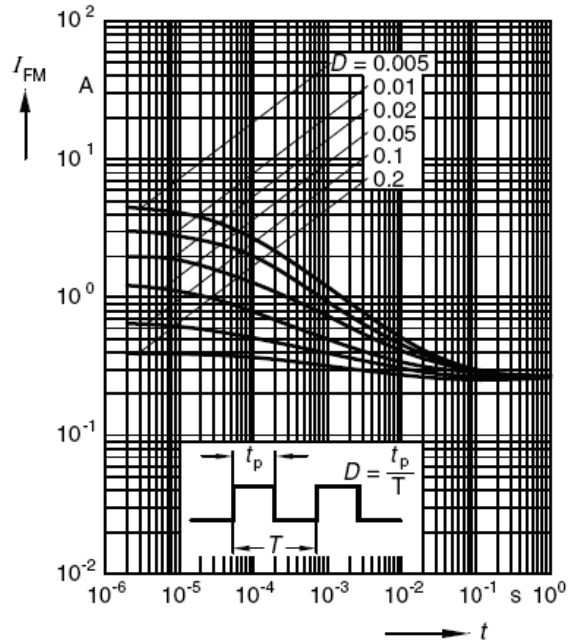
**Reverse current  $I_R = f(T_A)$**



**Forward current  $I_F = f(V_F)$**



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



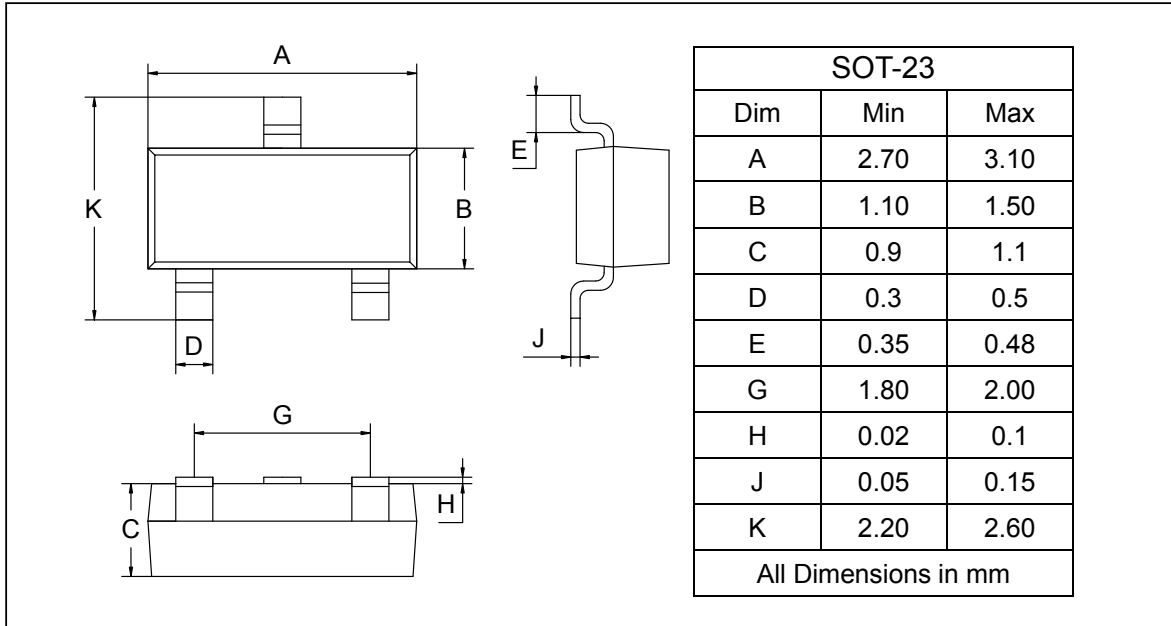
Surface mount switching diode

**MMBD7000**

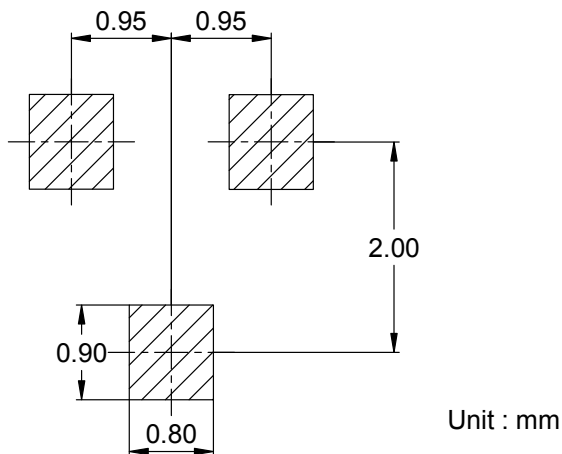
**PACKAGE OUTLINE**

Plastic surface mounted package

SOT-23



**SOLDERING FOOTPRINT**



**PACKAGE INFORMATION**

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