

## Dual series switching diode

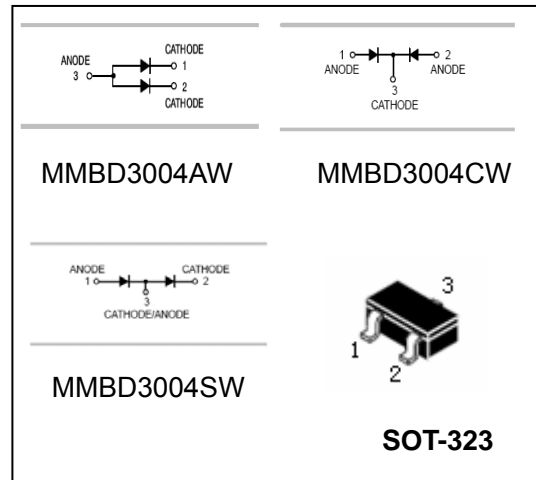
## MMBD3004AW/CW/SW

### FEATURES

- Fast switching speed.
- High conductance.
- High reverse breakdown voltage rating.
- Surface mount package ideally suited for automatic insertion.



Lead-free



### APPLICATIONS

- Small signal switching.

### ORDERING INFORMATION

Type No.	Marking	Package Code
MMBD3004AW	KAD	SOT-323
MMBD3004CW	KAC	SOT-323
MMBD3004SW	KAE	SOT-323

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	$V_{RRM}$	350	V
Working peak reverse voltage Continuous Reverse voltage	$V_{RWM}$ $V_R$	300	V
RMS reverse voltage	$V_{R(RMS)}$	212	V
Forward continuous current	$I_F$	225	mA
Peak repetitive forward current	$I_{FRM}$	625	mA
Non-Repetitive peak forward surge current @t=1.0µs @t=1.0s	$I_{FSM}$	4 1	A
Power dissipation	$P_d$	250	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	500	°C/W
Operating and storage temperature range	$T_j, T_{STG}$	-65 to +150	°C



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

Parameter	Symbol	Test conditions	MIN	Typ	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=150\mu A$	350			V
Reverse voltage leakage current	$I_R$	$V_R=240V$ $V_R=240V, T_j=150^\circ C$		30 35	100 100	nA $\mu A$
Forward voltage	$V_F$	$I_F=20mA$ $I_F=100mA$ $I_F=200mA$		0.78 0.93 1.03	0.87 1.0 1.25	mV
Total capacitance	$C_T$	$V_R=0V, f=1MHz$		1.0	5.0	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=30mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$			50	ns

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

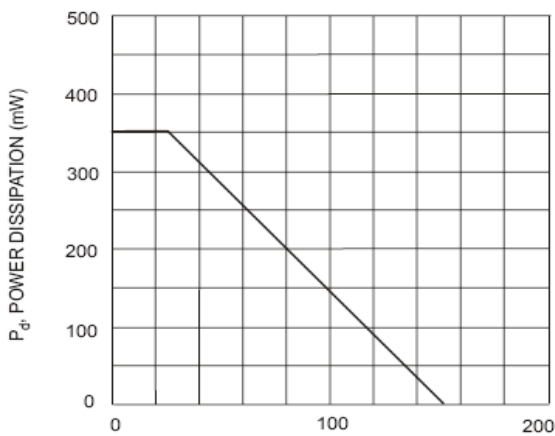


Fig. 1 Power Derating Curve, total package

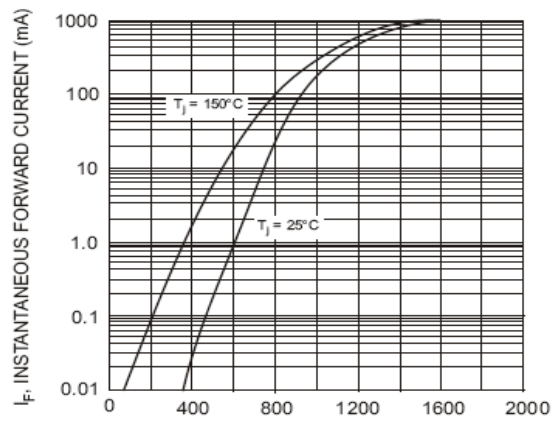


Fig. 2 Typical Forward Characteristics, per element

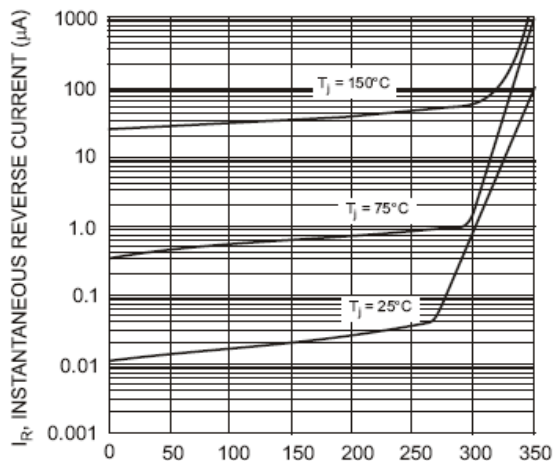


Fig. 3 Typical Reverse Characteristics, per element

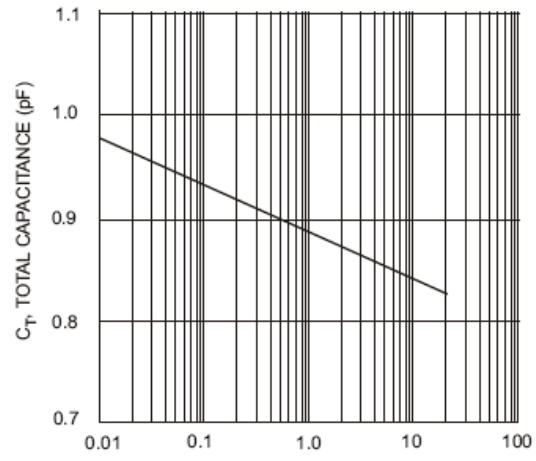


Fig. 4 Typical Total Capacitance vs. Reverse Voltage, per element

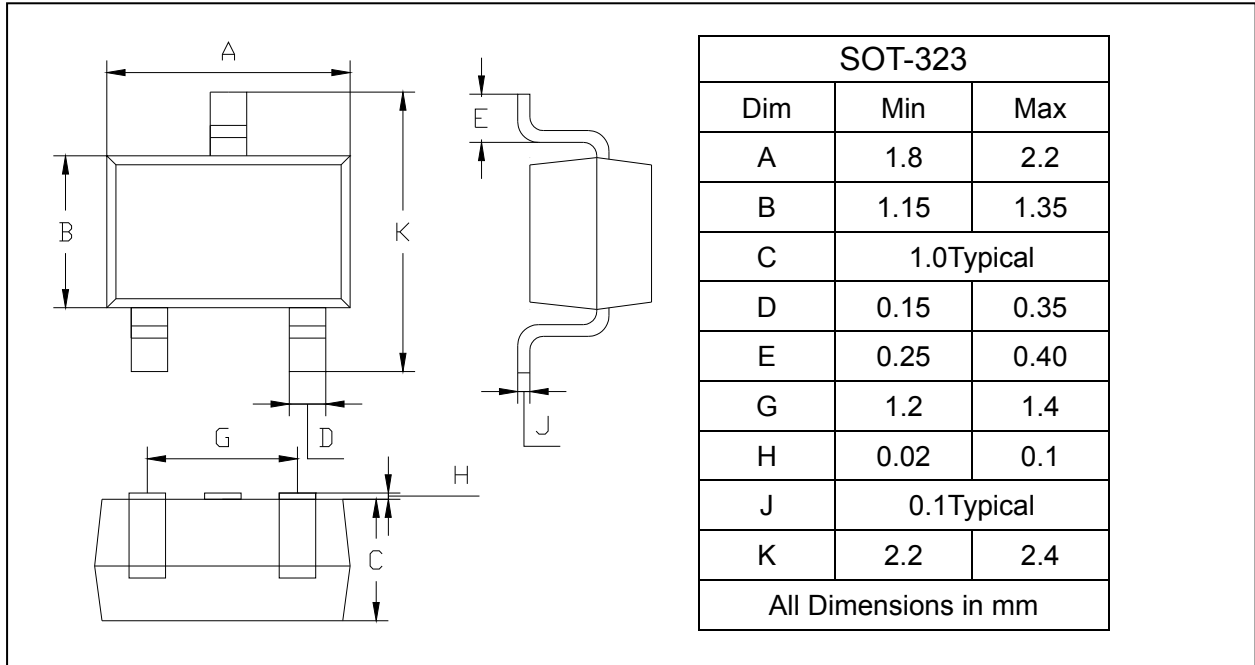
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**MMBD3004AW/CW/SW**

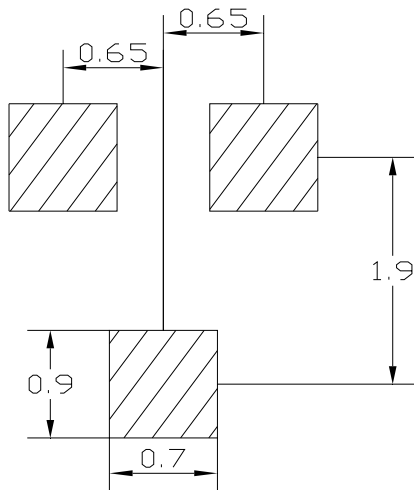
PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
MMBD3004AW/CW/SW	SOT-323	3000/Tape&Reel