

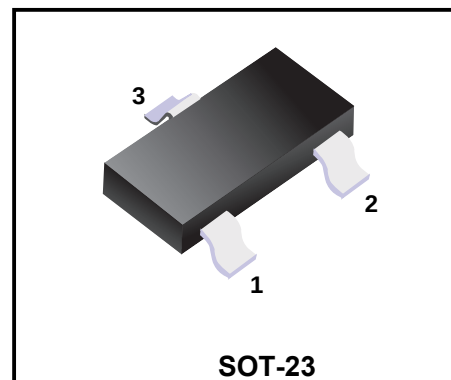
HIGH VOLTAGE SURFACE MOUNT DUAL SWITCHING DIODE

FEATURES

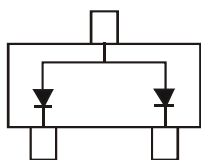
- ♦Fast switching speed
- ♦High conductance
- ♦High reverse breakdown voltage rating
- ♦Surface mount package ideally suited for automatic insertion

APPLICATIONS

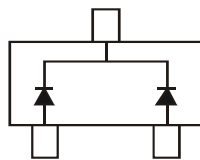
- ♦Small signal switching



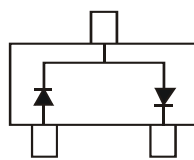
Marking Code



MMBD3004A Marking: KAD



MMBD3004C Marking: KAC



MMBD3004S Marking: KAE

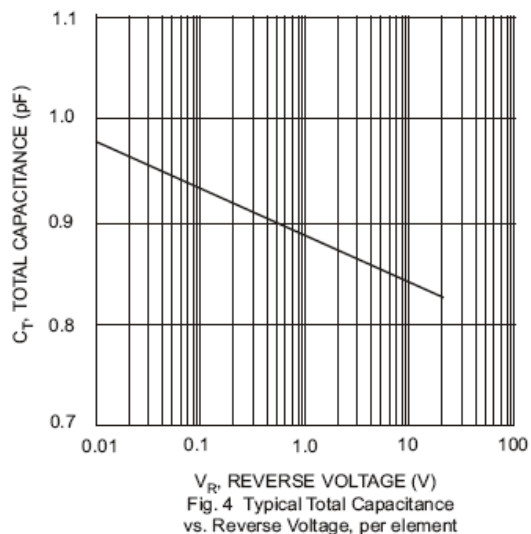
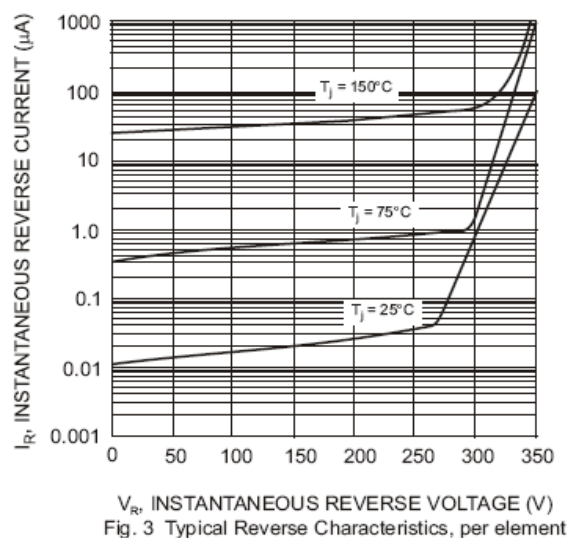
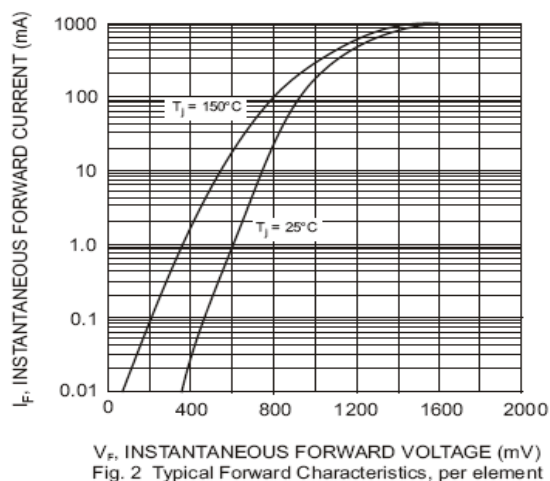
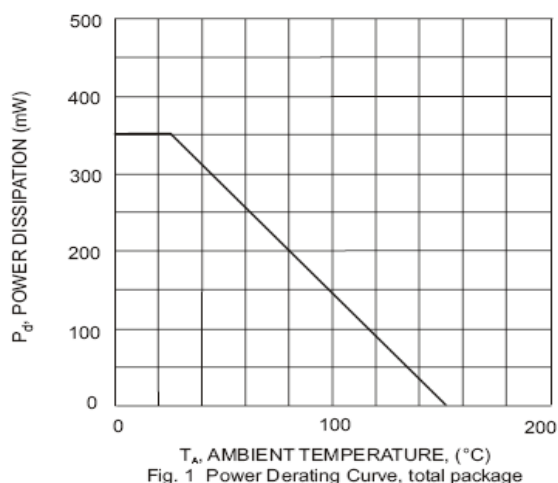
MAXIMUM RATING @ Ta=25°C unless otherwise specified

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	350	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	357	°C/W
Operating and storage temperature range	T_J, T_{STG}	-65 to +150	°C

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 μA
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	V
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



Ordering information

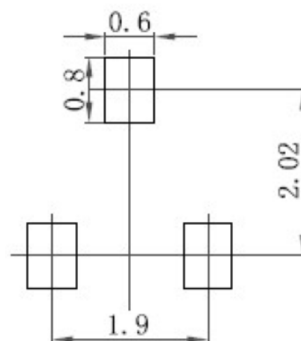
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-23

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
E	1.9		75	
E1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



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