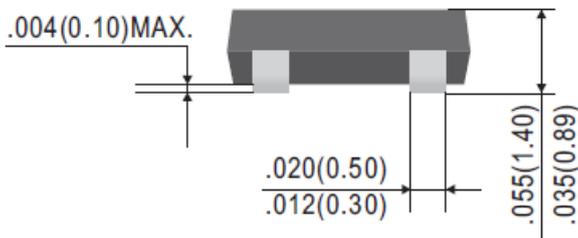
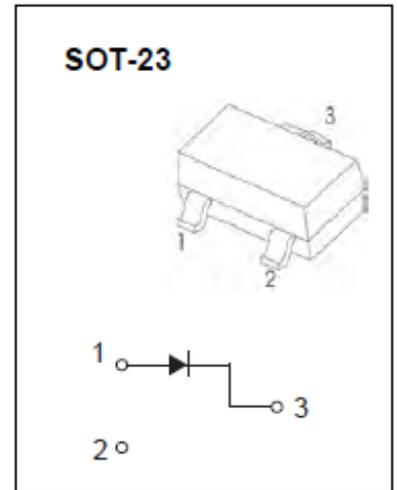
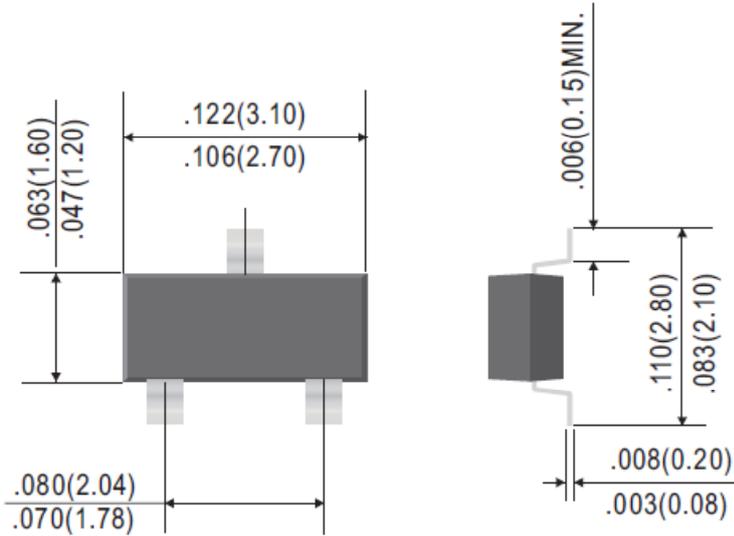




MMBD3004A



High Voltage Surface Mount Switching Diode



Dimensions in inches and (millimeters)

FEATURES

- Fast Switching Speed
- High Conductance
- High Reverse Breakdown Voltage Rating
- We declare that the material of product compliance with RoHS requirements.
- Pb-Free package is available
- RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"
- Moisture Sensitivity Level 1

MARKING: KAD



MMBD3004A



High Voltage Surface Mount Switching Diode

Maximum Ratings (T _A =25°C unless otherwise specified)			
Characteristic	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	350	V
Working Peak Reverse Voltage	V _{RWM}	300	V
DC Blocking Voltage	V _R		V
RMS Reverse Voltage	V _{R(RMS)}	212	V
Forward Continuous Current (Note 2)	I _F	225	mA
Peak Repetitive Forward Current (Note 2)	I _{FRM}	625	mA
Non-Repetitive Peak Forward Surge Current		@t=1.0μs	4
		@t=1.0s	1
Power Dissipation (Note 2)	P _D	350	mW
Thermal Resistance from Junction to Ambient (Note 2)	R _{θJA}	357	°C/W
Operating/ Junction and Storage Temperature Range	T _J , T _{STG}	-55~+150	°C

Electrical Characteristics (T _A =25°C unless otherwise specified)						
Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (Note 1)	V _(BR)	I _R =100μA	350	—	—	V
Reverse Current (Note 1)	I _R	V _R =240V	—	30	100	nA
		V _R =240V, T _J =150°C	—	35	100	μA
Forward Voltage (Note 1)	V _F	I _F =20mA	—	0.78	0.87	V
		I _F =100mA	—	0.93	1	
		I _F =200mA	—	1.03	1.25	
Total Capacitance	C _T	V _R =0V, f=1.0MHZ	—	1	5	pF
Reverse Recovery Time	t _{rr}	I _F =I _R =30mA I _{rr} =3.0mA, R _L =100Ω	—	—	50	ns

Notes: 1. Short duration test pulse used to minimize self-heating effect.

2. Part mounted on FR-4 board with recommended pad layout.



MMBD3004A



High Voltage Surface Mount Switching Diode

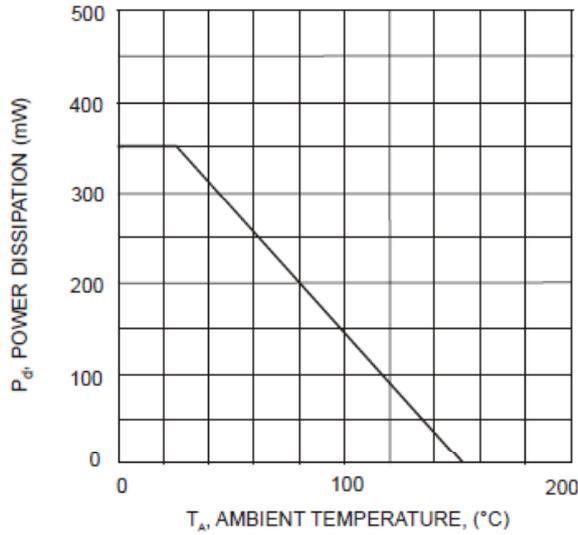


Fig. 1 Power Derating Curve, total package

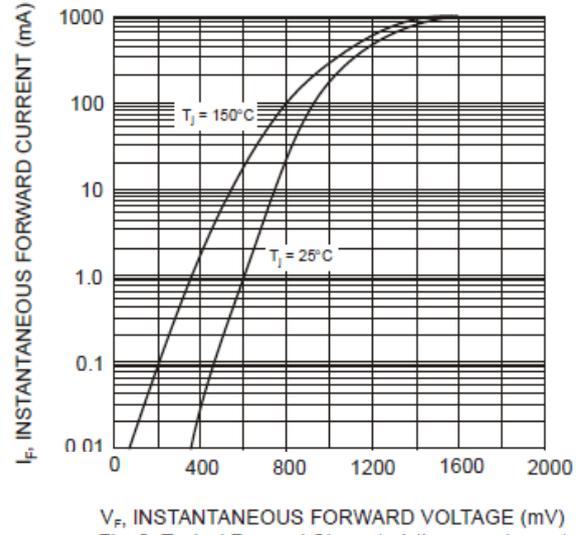


Fig. 2 Typical Forward Characteristics, per element

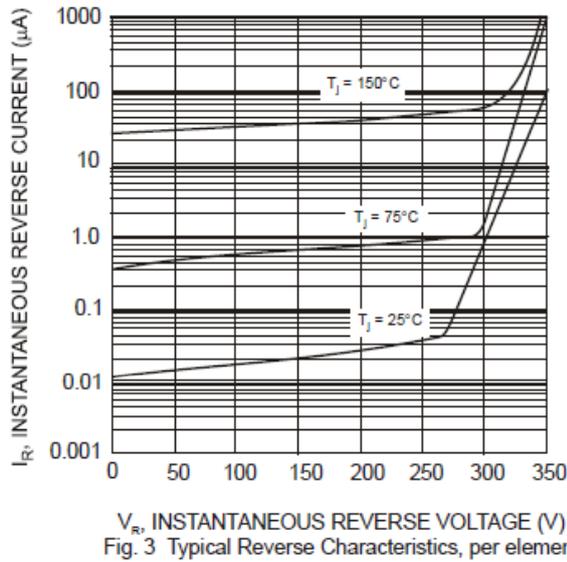


Fig. 3 Typical Reverse Characteristics, per element

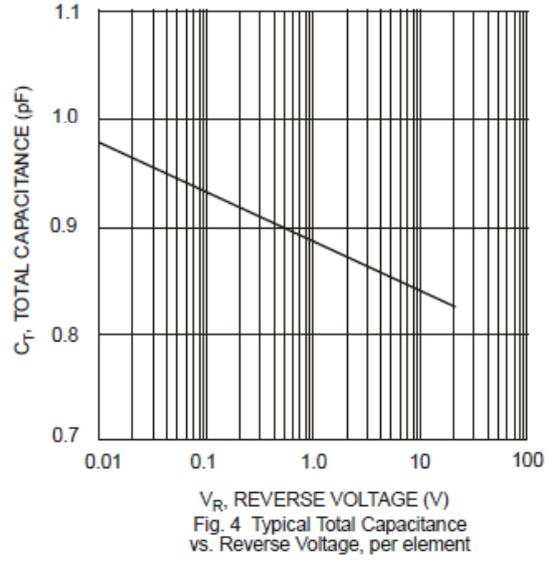


Fig. 4 Typical Total Capacitance vs. Reverse Voltage, per element