

## Features

- High Conductance
- High Reverse Breakdown Voltage Rating
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating

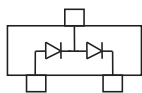
## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 310°C/W Junction to Ambient

MCC Part Number	Device Marking	Peak Repetitive Reverse Voltage $V_{RRM}$	RMS Reverse Voltage $V_{R(RMS)}$	Continuous Reverse Voltage $V_R$
MMBD3004S	4P	350V	212V	240V

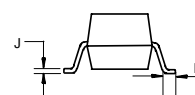
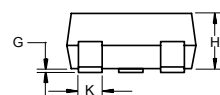
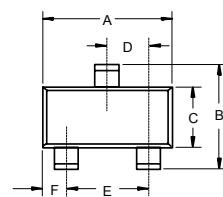
Continuous Forward Current	$I_F$	225mA	
Peak Forward Surge Current	$I_{FSM}$	1A 4A	@ $t=1.0s$ @ $t=1.0\mu s$
Repetitive Peak Forward Current	$I_{FRM}$	625mA	
Power Dissipation	$P_d$	410mW	$T_A=25^\circ C$

## Internal Structure



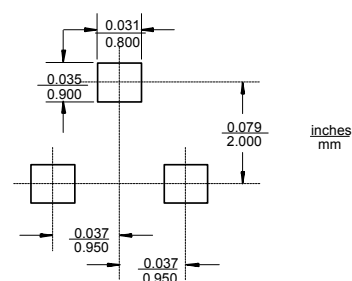
**410 mW**  
**High Voltage**  
**Switching Diode**  
**240 Volts**

## SOT-23



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.083	0.104	2.10	2.64	
C	0.047	0.055	1.20	1.40	
D	0.034	0.041	0.85	1.05	
E	0.067	0.083	1.70	2.10	
F	0.018	0.024	0.45	0.60	
G	0.0004	0.006	0.01	0.15	
H	0.035	0.043	0.90	1.10	
J	0.003	0.007	0.08	0.18	
K	0.014	0.020	0.35	0.51	
L	0.007	0.020	0.20	0.50	

## Suggested Solder Pad Layout



**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Minimum Reverse Breakdown Voltage	$V_{BR}$	350V	$I_R=150\mu A$
Maximum Instantaneous Forward Voltage	$V_F$	0.87V 1.00V 1.25V	$I_F=20.0mA$ $I_F=100.0mA$ $I_F=200.0mA$
Maximum Instantaneous Reverse Current	$I_R$	100nA 100 $\mu A$	$V_R=240V$ $V_R=240V, T_j=150^\circ C$
Maximum Junction Capacitance	$C_J$	5.0pF	$V_R=0.0V, f=1.0MHz$
Maximum Reverse Recovery Time	$t_{rr}$	50.0ns	$I_F=30mA, I_R=30mA$ $I_{rr}=3mA, R_L=100\Omega$

## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

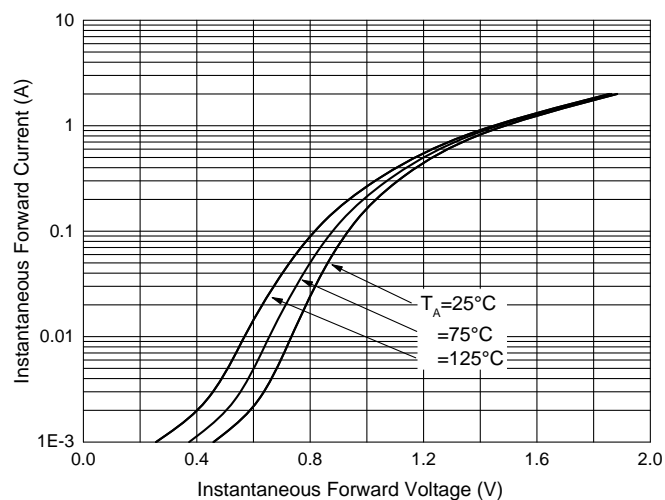


Fig. 2 - Typical Reverse Leakage Characteristics

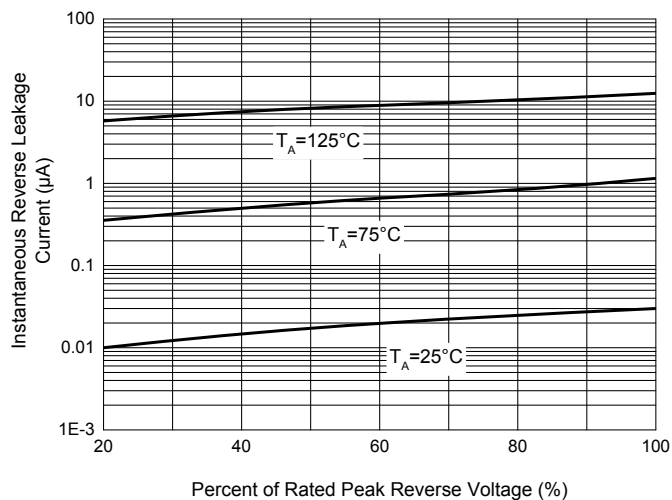
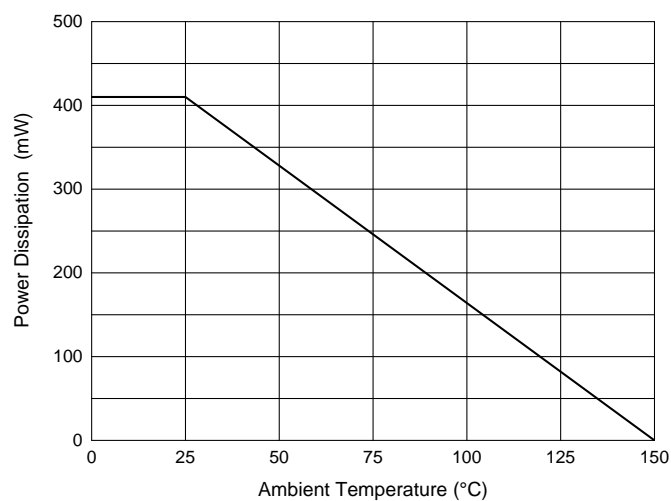


Fig. 3 - Power Derating Curve



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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