

**Features**

- Designed For Applications Requiring High Voltage Capability
- Low Current Leakage
- Small Outline Surface Mount Package
- 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

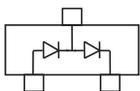
**Maximum Ratings**

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C

MCC Part Number	Device Marking	Non-Repetitive Peak Reverse voltage $V_{RM}$	Continuous Reverse Voltage $V_R$
MMBD2004S	B6D	300V	240V

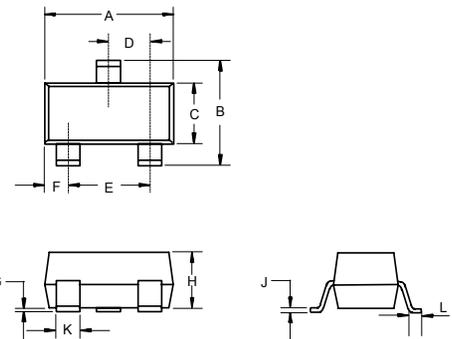
Continuous Forward Current	$I_F$	225mA	
Peak Forward Surge Current	$I_{FSM}$	1A 4A	@ t=1.0s @ t=1.0µs
Repetitive Peak Forward Current	$I_{FRM}$	625mA	
Power Dissipation	$P_d$	250mW	

**Internal Structure**



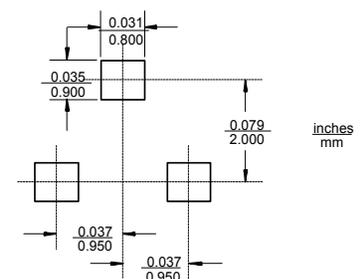
**250mW 300Volt  
Dual Series  
Switching Diode**

**SOT-23**



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	$V_{BR}$	240V	$I_R=100\mu A$
Maximum Instantaneous Forward Voltage	$V_F$	1.00V	$I_F=100.0mA$
Maximum Instantaneous Reverse Current	$I_R$	0.1 $\mu A$	$V_R=240V$
Maximum Junction Capacitance	$C_D$	5.0pF	$V_R=0.0V, f=1.0MHz$
Maximum Reverse Recovery Time	$t_{rr}$	50.0ns	$I_F=30mA, I_R=30mA$ $R_L=100\Omega$

## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

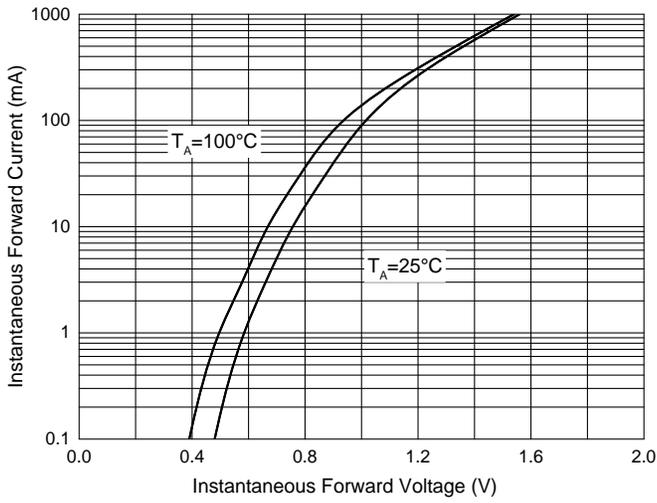


Fig. 2 - Typical Reverse Leakage Characteristics

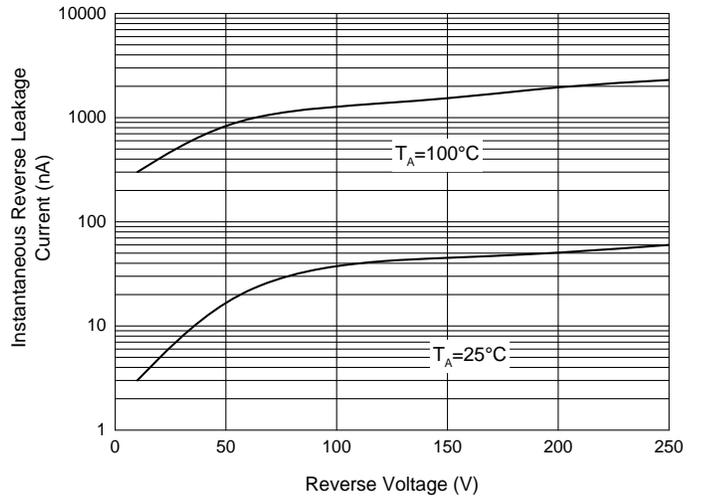
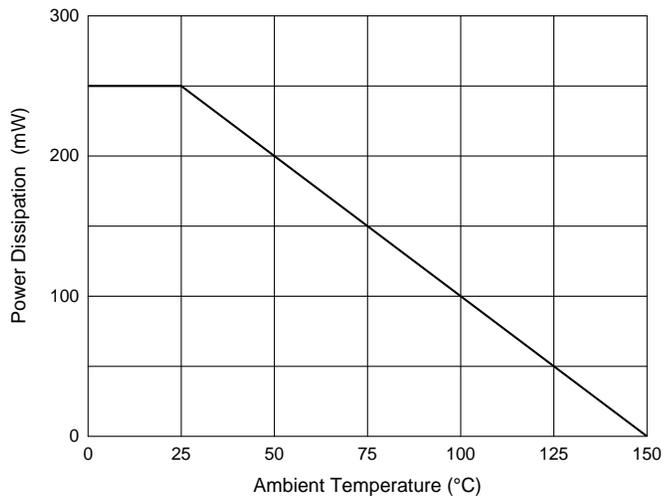


Fig. 3 - Power Derating Curve



## 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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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9