



Micro Commercial Components



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Features

- Halogen free available upon request by adding suffix "-HF"
- Designed for applications requiring high voltage capability
- Low Current Leakage
- Small Outline Surface Mount Package
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Marking: B6D
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

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

Electrical Characteristics @ 25°C Unless Otherwise Specified

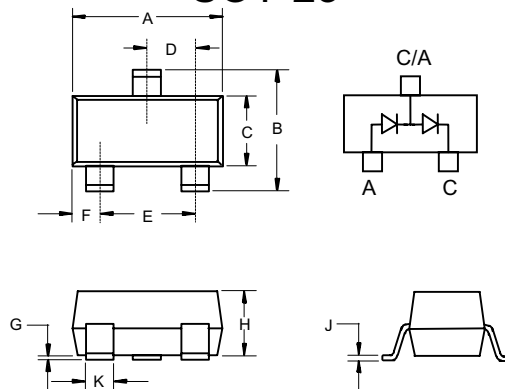
Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	300	V
DC Blocking Voltage	V_R	240	V
Continuous Forward Current	I_F	225	mA
Peak Repetitive Forward Current	I_{FRM}	625	mA
Forward Surge Current @t=1us	I_{FSM}	4.0	A
@t=1s		1.0	A
Power Dissipation	P_D	250	mW

Parameter	Symbol	Test Conditions	MIN	MAX	UNIT
Reverse breakdown voltage	V_{BR}	$I_R=100\mu A$	240	...	V
Reverse voltage leakage current	I_R	$V_R=240V$	...	0.1	μA
Forward voltage	V_F	$I_F=100mA$	...	1	V
Diode capacitance	C_D	$V_R=0V, f=1MHz$	...	5	pF
Reverse recovery time	T_{rr}	$I_F=I_R=30mA, R_L=100\Omega$	...	50	ns

MMBD2004S

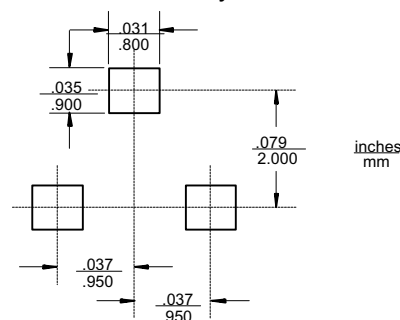
250mW 300Volt Dual Series Switching Diode

SOT-23



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

Suggested Solder Pad Layout



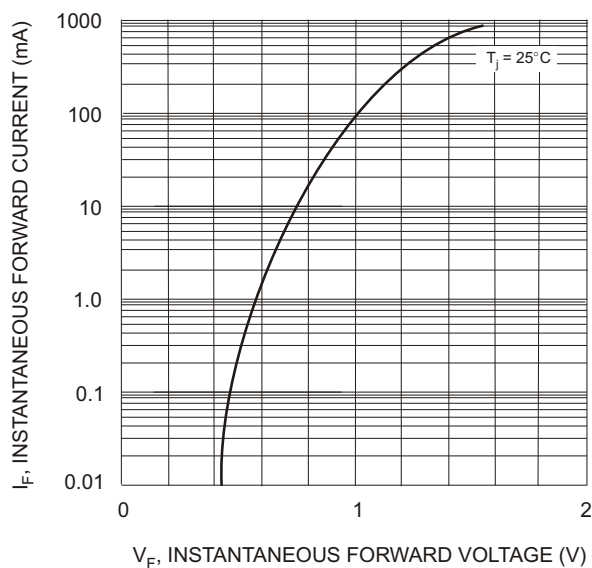


Fig. 1 Forward Characteristics

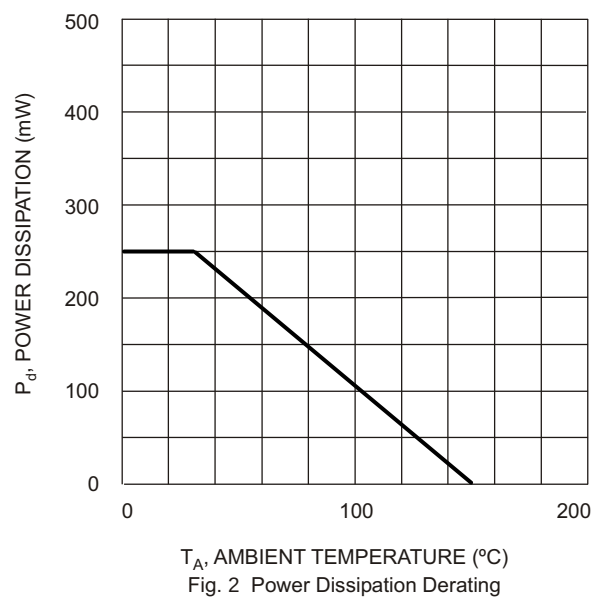


Fig. 2 Power Dissipation Derating

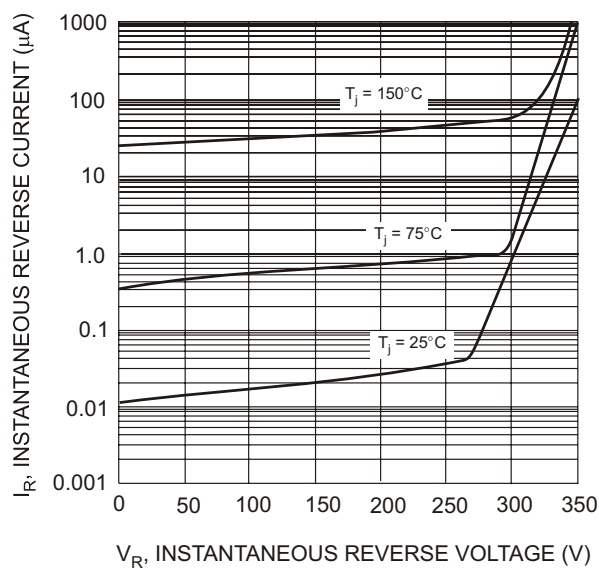


Fig. 3 Typical Reverse Characteristics, per element

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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