

M·C·C·

Micro Commercial Components



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 20736 Marilla Street Chatsworth
 CA 91311
 Phone: (818) 701-4933
 Fax: (818) 701-4939

MMBD3004S

Features

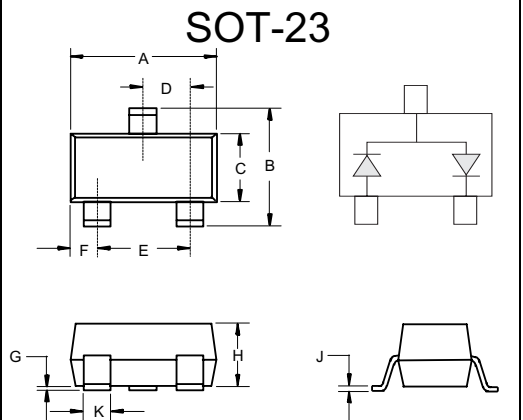
- Halogen free available upon request by adding suffix "-HF"
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- High Conductance
- High Reverse Breakdown Voltage Rating
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

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

410 mW High Voltage Switching Diode 240 Volts

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	240	V
Peak Repetitive Reverse Voltage	V_{RRM}	350	V
RMS Reverse Voltage	$V_{R(RMS)}$	212	V
Continuous Forward Current	I_F	225	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Forward Surge Current $t_p = 1\mu s$	I_{FSM}	4	A
Forward Surge Current $t_p = 1s$	I_{FSM}	1	A
Total Power Dissipation @ $T_A = 25^\circ C$	P_D	410	mW

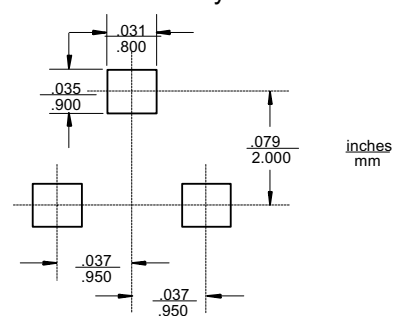


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

Electrical Characteristics @ 25°C Unless Otherwise Specified

Ratings	Symbol	Value	Test Condition
Maximum Forward Voltage	V_F	0.87 V 1.0 V 1.25 V	$I_F = 20mA$ $I_F = 100mA$ $I_F = 200mA$
Maximum Reverse Current	I_R	100 nA 100 μA	$V_R = 240V$ $V_R = 240V, T_J = 150^\circ C$
Minimum Reverse Breakdown Voltage	$V_{(BR)}$	350 V	$I_R = 150\mu A$
Maximum Junction Capacitance	C_T	5.0 pF	$V_R = 0, f = 1MHz$
Maximum Reverse Recovery Time	t_{rr}	50 ns	$I_F = I_R = 30mA, Rec. to I_{RR} = 0.1 I_R, R_L = 100\Omega$

Suggested Solder Pad Layout

www.mccsemi.com

ELECTRICAL CHARACTERISTICS CURVES

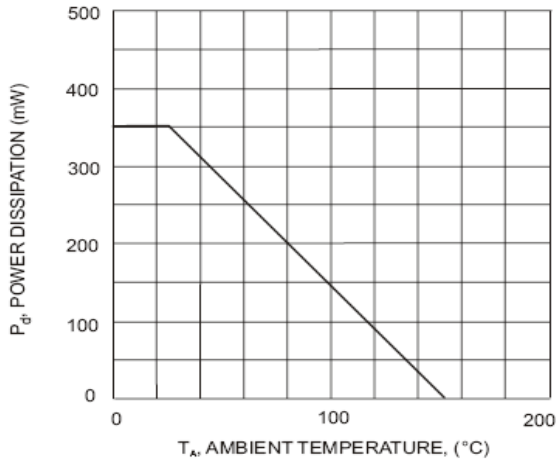


Fig. 1 Power Derating Curve, total package

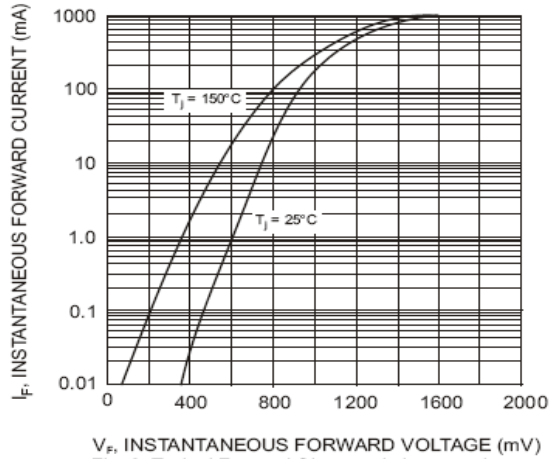


Fig. 2 Typical Forward Characteristics, per element

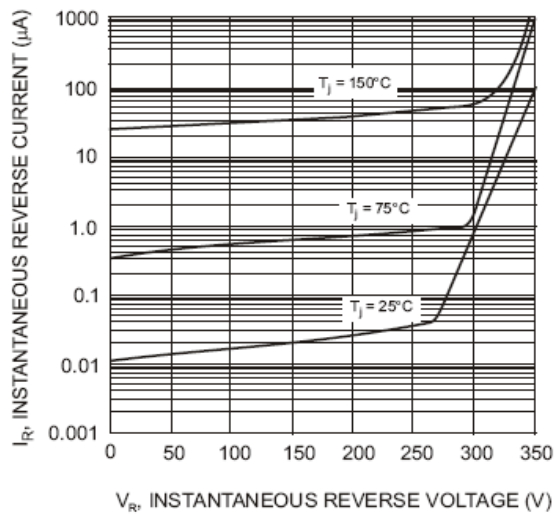


Fig. 3 Typical Reverse Characteristics, per element

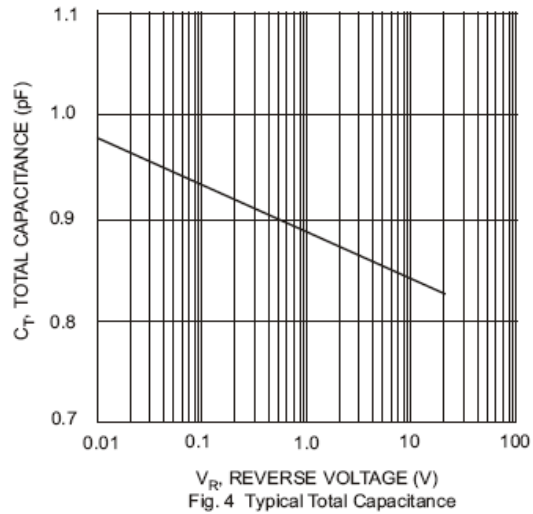


Fig. 4 Typical Total Capacitance vs. Reverse Voltage, per element



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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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