



Micro Commercial Components  
21201 Itasca Street Chatsworth  
CA 91311  
Phone: (818) 701-4933  
Fax: (818) 701-4939

## MCCD2004S

### Features

- Surface Mount SOT-23 Package
- Capable of 350mWatts of Power Dissipation
- Suited For Applications Requiring High Voltage Capability
- Marking Code: DB6

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 357°C/W Junction to Ambient

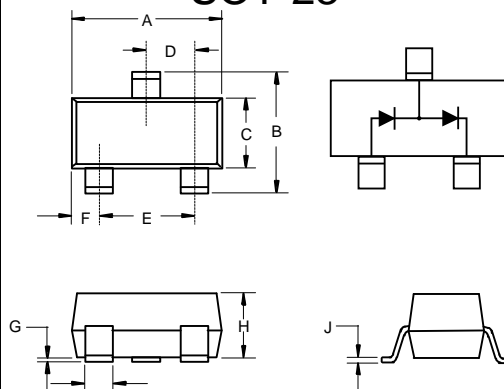
## 350 mW High Voltage Switching Diode 240 Volts

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	$V_R$	240	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	300	V
Rectified Current	$I_O$	200	mA
Continuous Forward Current	$I_F$	225	mA
Repetitive Peak Forward Current	$I_{FRM}$	625	mA
Forward Surge Current $t_P = 1\text{ms}$	$I_{FSM}$	4000	mA
Forward Surge Current $t_P = 1\text{s}$	$I_{FSM}$	1000	mA
Total Power Dissipation @ $T_A = 25^\circ\text{C}$	$P_D$	350	mW

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

Ratings	Symbol	Value	Test Condition
Maximum Forward Voltage	$V_F$	1.0 V	$I_F = 100\text{mA}$
Maximum Reverse Current	$I_R$	100 nA 100 $\mu\text{A}$	$V_R = 240\text{V}$ $V_R = 240\text{V}, T_A = 150^\circ\text{C}$
Minimum Reverse Breakdown Voltage	$V_{(BR)}$	300 V	$I_R = 100\mu\text{A}$
Maximum Junction Capacitance	$C_T$	5.0 pF	$V_R = 0, f = 1\text{MHz}$
Maximum Reverse Recovery Time	$t_{rr}$	50 ns	$I_F = I_R = 30\text{mA}$ , Rec. to 3.0mA, $R_L = 100\Omega$

### SOT-23



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.098	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

