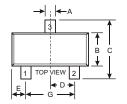


## **HIGH SPEED SWITCHING DIODES**

### **Features**

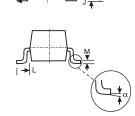
- Low Forward Voltage
- Low Leakage Current
- Fast reverse recovery time
- Marking Code:B3



SOT-23						
Dim	Min	Max				
Α	0.37	0.51				
В	1.20	1.40				
С	2.30	2.50				
D	0.89	1.03				
E	0.45	0.60				
G	1.78	2.05				
Н	2.80	3.00				
J	0.013	0.10				
K	0.903	1.10				
L	0.45	0.61				
М	0.085	0.180				
α	0°	8°				
All Dimensions in mm						

## Maximum Ratings @ T<sub>A</sub> = 25°C unless otherwise specified

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	85	٧
DC Blocking Voltage	$V_{R}$	80	V
Forward Continuous Current	I <sub>FM</sub>	300	mA
Average Rectified Output Current	Io	100	mA
Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	2.0	Α
Power Dissipation	$P_D$	150	mW
Thermal Resistance	$R_{\theta JA}$	833	°C/W
Junction Temperature	$T_J$	150	$^{\circ}$
Storage Temperature Range	T <sub>STG</sub>	-55~+150	$^{\circ}$



### **Equivalent Circuit**



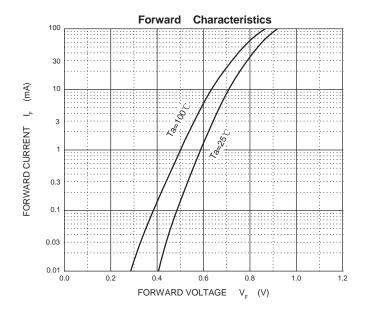
# Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

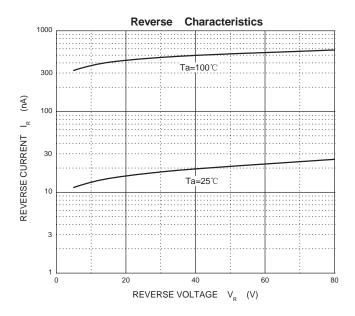
Parameter	Symbol	Min	Тур	Max	Unit	Conditions
Reverse breakdown voltage	V <sub>(BR)</sub>	80			V	I <sub>R</sub> =100μA
Forward voltage	V <sub>F1</sub>		0.61		V	I <sub>F</sub> =1mA
	V <sub>F2</sub>		0.74		V	I <sub>F</sub> =10mA
	V <sub>F3</sub>		0.92	1.2	V	I <sub>F</sub> =100mA
Reverse current	I <sub>R1</sub>			0.1	uA	V <sub>R</sub> =30V
	I <sub>R2</sub>			0.5	uA	V <sub>R</sub> =80V
Capacitance between terminals	Ст		2.2	4.0	pF	V <sub>R</sub> =0,f=1MHz
Reverse recovery time	t <sub>rr</sub>		1.6	4.0	ns	$I_F=I_R=10$ mA, $I_{rr}=0.1$ × $I_R$

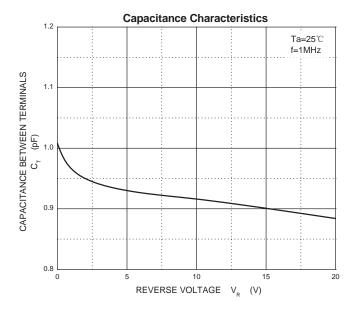


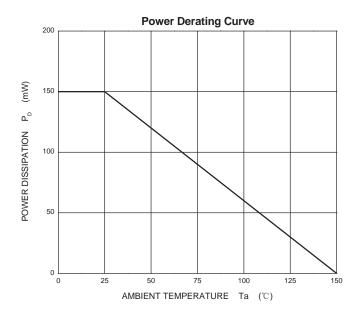
# HIGH SPEED SWITCHING DIODES

### **TYPICAL TRANSIENT CHARACTERISTICS**









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#### HIGH SPEED SWITCHING DIODES

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