

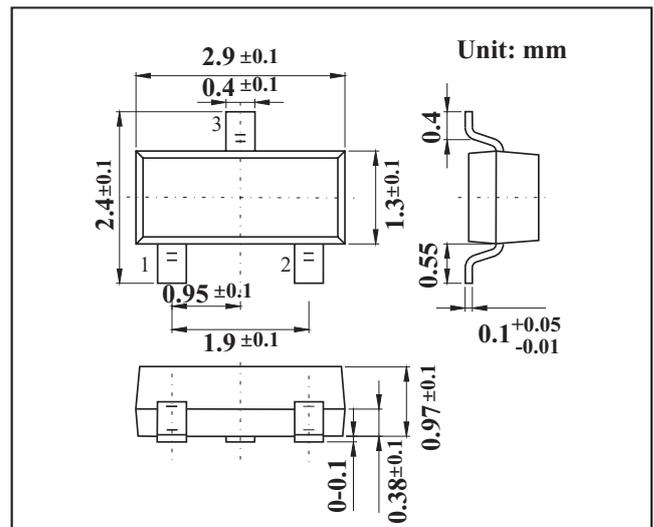
## SOT-23 Fast Switching Diode

### FEATURES

- Dual Switching Diode
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications

### MECHANICAL DATA

- Case style: SOT-23 molded plastic
- Mounting Position: Any



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

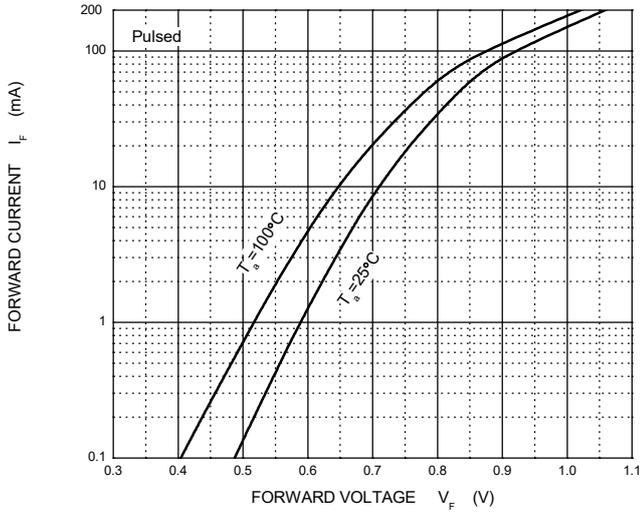
Parameter	Symbol	Rating	Unit
Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	
Working Peak Reverse Voltage	$V_{RWM}$	53	
RMS Reverse Voltage	$V_{RMS}$	53	
Average Rectified Output Current	$I_O$	200	mA
Non-Repetitive Peak Forward Surge Current @ t = 1us @ t = 1s	$I_{FSM}$	2	A
		1	
Power Dissipation	$P_d$	225	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	556	°C/W
Junction Temperature	$T_J$	150	°C
Storage Temperature range	$T_{stg}$	-55 to 150	

### Electrical Specification (T<sub>A</sub>=25°C unless otherwise specified)

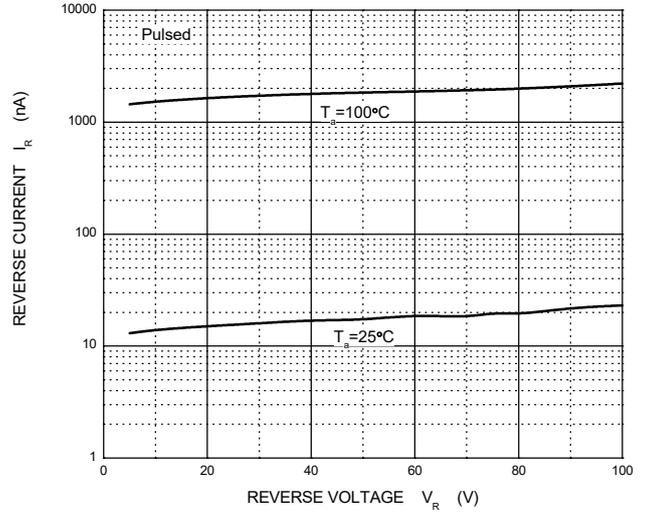
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_R$	$I_R = 100 \mu A$	100			V
Forward voltage	$V_F$	$I_F = 1 \text{ mA}$			0.7	
		$I_F = 10 \text{ mA}$			0.82	
		$I_F = 100 \text{ mA}$			1.1	
Reverse voltage leakage current	$I_R$	$V_R = 50 \text{ V}$			1	uA
		$V_R = 100 \text{ V}$			3	
Diode capacitance	$C_T$	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$			2	pF
Reverse recovery time	$t_{rr}$	$I_F = I_R = 10 \text{ mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$			4	ns

## RATINGS AND CHARACTERISTIC CURVES

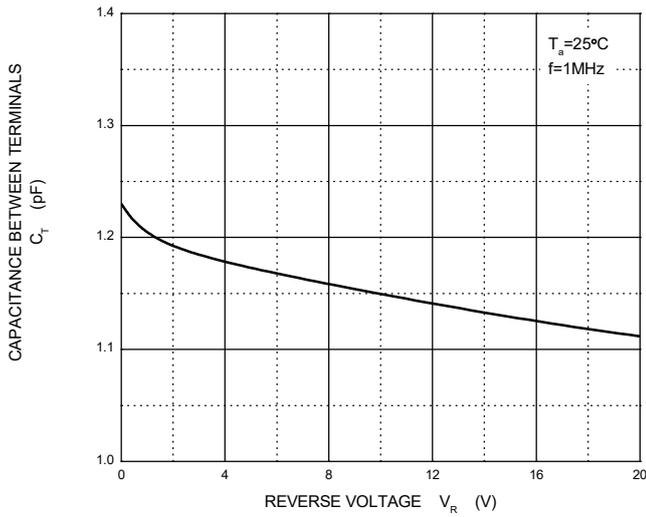
**Forward Characteristics**



**Reverse Characteristics**



**Capacitance Characteristics**



**Power Derating Curve**

