

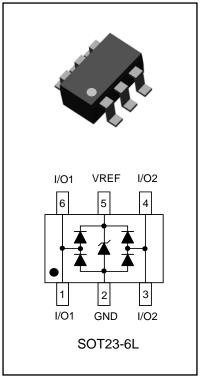


# **Low Capacitance TVS and Diode Array**

This diode array is configured to protect up to two data transmission lines acting as a line terminator, minimizing overshoot and undershoot conditions due to bus impedance as well as protect against over-voltage events as electrostatic discharges. Additionally the TVS Device offers overvoltage transient protection between the operating voltage bus and ground plane.

#### **SPECIFICATION FEATURES**

- Peak Power Dissipation of 350W 8/20µs
- Maximum Capacitance of 5.0pF at 0Vdc 1MHz Line-to-Ground
- Maximum Leakage Current of 1µA @ VRWM
- Industry Standard SMT Package SOT23-6L
- IEC61000-4-2, IEC61000-4-4 and IEC61000-4-5 Full Compliance
- 100% Tin Matte finish (LEAD-FREE PRODUCT)



#### **APPLICATIONS**

- USB 2.0 and Firewire Port Protection
- LAN/WLAN Access Point terminals
- Video Signal line protection
- I<sup>2</sup>C Bus Protection



## **MAXIMUM RATINGS** Tj = 25°C Unless otherwise noted

Rating	Symbol	Value	Units
Peak Pulse Power (8/20µs Waveform)	P <sub>PPM</sub>	350	W
Peak Pulse Current (8/20µs Waveform)	I <sub>PP</sub>	17.5	А
Operating Junction Temperature Range	ТЈ	-55 to +125	°C
Storage Temperature Range	T <sub>stg</sub>	-55 to +150	°C
Soldering Temperature, t max = 10s	TL	260	°C





## **ELECTRICAL CHARACTERISTICS** Tj = 25°C unless otherwise noted

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V <sub>WRM</sub>				5	V
Reverse Breakdown Voltage	$V_{BR}$	I <sub>BR</sub> = 1mA	6.2			V
Reverse Leakage Current	I <sub>R</sub>	$V_R = 5V$			1	μΑ
Clamping Voltage (8/20µs)	V <sub>c</sub>	$I_{pp} = 1A$			9.5	V
Clamping Voltage (8/20µs)	V <sub>c</sub>	I <sub>pp</sub> = 10A			12	V
Clamping Voltage (8/20µs)	V <sub>c</sub>	I <sub>pp</sub> = 17.5A			20	V
Off State Junction Capacitance	Cj	0 Vdc Bias f = 1MHz Between I/O pins and GND			4.0	pF
		0 Vdc Bias f = 1MHz Between I/O pins			2.5	pF





## **PACKAGE DIMENSIONS**

