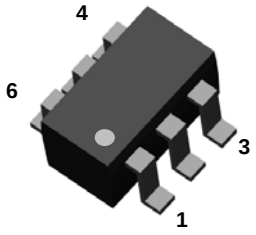
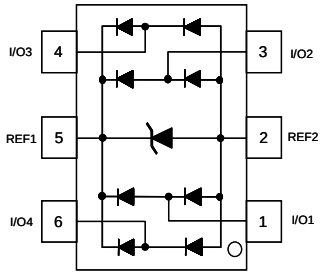
Low Capacitance TVS and Diode Array

This diode array is configured to protect up to four 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. Additionaly the TVS Device offers overvoltage transient protection between the operating voltage bus and ground plane.





SOT23-6L

SPECIFICATION FEATURES

- **Peak Power Dissipation of 350W 8/20μs**
- **Maximum Capacitance of 3.0pF at 0Vdc 1MHz Line-to-Ground**
- **Maximum Leakage Current of 0.1μA @ 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^2C Bus Protection**

MAXIMUM RATINGS Tj = 25°C Unless otherwise noted

Rating	Symbol	Value	Units
Peak Pulse Power (8/20μs Waveform)	P_{PPM}	350	W
Peak Pulse Current (8/20μs Waveform)	I_{PP}	17.5	A
Operating Junction Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{stg}	-55 to +150	°C
Soldering Temperature, t max = 10s	T_L	260	°C

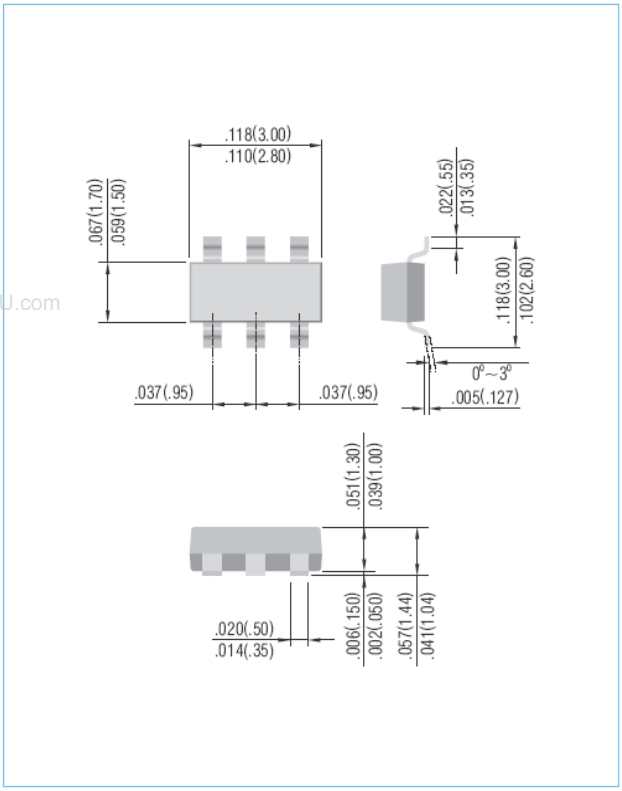
ELECTRICAL CHARACTERISTICS

Tj = 25°C unless otherwise noted

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{WRM}				5	V
Reverse Breakdown Voltage	V_{BR}	I_{BR} = 1mA	6.2			V
Reverse Leakage Current	I_R	V_R = 5V			0.1	µA
Clamping Voltage (8/20µs)	V_c	I_{pp} = 1 A			9.5	V
Clamping Voltage (8/20µs)	V_c	I_{pp} = 10 A			12	V
Clamping Voltage (8/20µs)	V_c	I_{pp} = 17.5 A			20	V
Off State Junction Capacitance	Cj	0 Vdc Bias f = 1MHz Between I/O pins and GND			3	pF
		0 Vdc Bias f = 1MHz Between I/O pins			2	pF

PACKAGE DIMENSIONS AND SUGGESTED PAD LAYOUT

SOT23-6L Unit: inch (mm)



SOT23-6L Unit: inch (mm)