

## Low Capacitance Diode Array

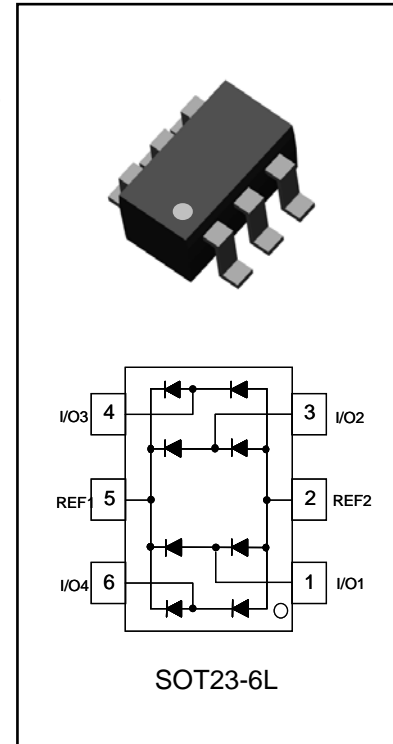
This diode array is configured to protect up to four data transmission lines acting as a line terminator, minimizing overshoot and undershoot conditions due to bus impedance as well as protect against over-voltage events as electrostatic discharges.

### SPECIFICATION FEATURES

- Maximum Capacitance of 3.0pF at 0Vdc 1MHz Line-to-Ground
- Peak Inverse voltage of 40V per diode
- Maximum Leakage Current of 1.0μA @ VR
- 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



### MAXIMUM RATINGS $T_j = 25^{\circ}\text{C}$ Unless otherwise noted

Rating	Symbol	Value	Units
Repetitive Peak Inverse Voltage	$V_{RRM}$	40	V
Continuous Reverse Voltage	$V_R$	40	V
Peak Pulse Current (8/20μs Waveform)	$I_{PP}$	24	A
Average Rectified Forward Current, Per Diode	$I_{F(AV)}$	50	mA
Power Dissipation, $T_j = 85^{\circ}\text{C}$ , $I_F = 200\text{mA}$ , Per Diode	$P_D$	100	mW
Operating Junction Temperature Range	$T_j$	-55 to +150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to +150	$^{\circ}\text{C}$
Soldering Temperature, $t_{max} = 10\text{ s}$	$T_L$	260	$^{\circ}\text{C}$

**ELECTRICAL CHARACTERISTICS**  $T_j = 25^\circ\text{C}$  unless otherwise noted

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Repetitive Peak Inverse Voltage	$V_{RRM}$				40	V
Breakdown Voltage	$V_{BR}$	$I_{BR} = 10\mu\text{A}$	50			V
Forward Voltage (8/20 $\mu\text{s}$ Pulse)	$V_F$	$I_{PP} = 1\text{A}$			2.0	V
		$I_{PP} = 10\text{A}$			5.0	V
Reverse Leakage Current	$I_R$	$V_R = 40\text{V}$			1.0	$\mu\text{A}$
Off-State Junction Capacitance	$C_J$	0Vdc Bias, $f = 1\text{ MHz}$ Between I/O pins and REF2 (Ground)			3.0	pF
		0Vdc Bias, $f = 1\text{ MHz}$ Between I/O pins		2.0		pF

DRAFT SPEC

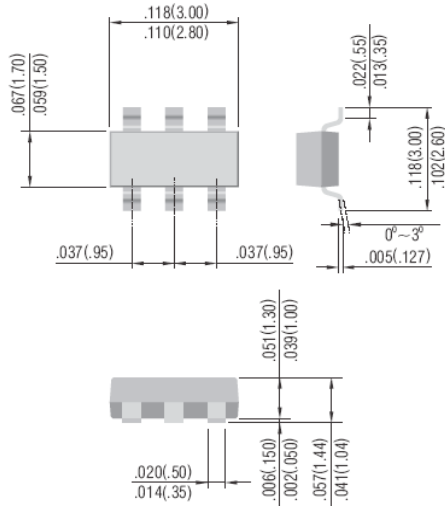


## PACKAGE DIMENSIONS AND SUGGESTED PAD LAYOUT

DRAFT SPEC

SOT23-6L

Unit: inch ( mm )



SOT23-6L

Unit: inch ( mm )

