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LEAD-FREE PRODUCTS

#### Low Capacitance TVS and Diode Array

PJUSBLC6-2

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. Additionaly 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 4.0pF at 0Vdc 1MHz Line-to-Ground
- Maximum Leakage Current of 5µA @ VRWM
- Industry Standard SMT Package SOT-23 6L
- IEC61000-4-2, IEC61000-4-4 and IEC61000-4-5 Full Compliance
- 100% Tin Matte finish (LEAD-FREE PRODUCT)
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)
- Marking code:602

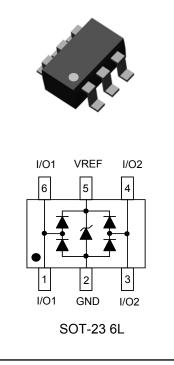
#### APPLICATIONS

- 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)	l <sub>PP</sub>	17.5	А
Operating Junction Temperature Range	ТJ	-55 to +125	°C
Storage Temperature Range	T <sub>stg</sub>	-55 to +150	°C
Soldering Temperature, t max = 10s	ΤL	260	°C

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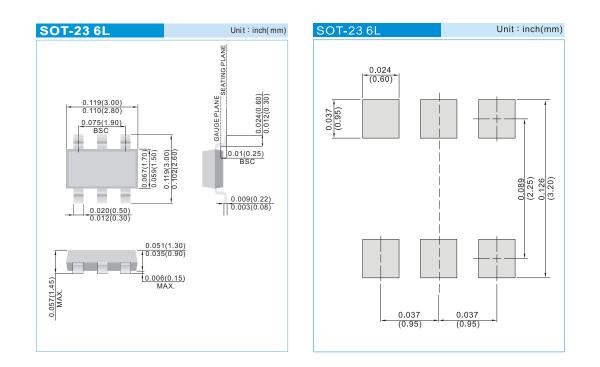
#### **ELECTRICAL CHARACTERISTICS** Tj = 25°C unless otherwise noted

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V <sub>WRM</sub>				5	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BR</sub> = 1mA	6.2			V
Reverse Leakage Current	۱ <sub>R</sub>	$V_R = 5V$			5	μA
Clamping Voltage (8/20µs)	Vc	$I_{pp} = 1A$			9.5	V
Clamping Voltage (8/20µs)	Vc	I <sub>pp</sub> = 10A			12	V
Clamping Voltage (8/20µs)	Vc	Ipp = 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







#### Part No\_packing code\_Version

PJUSBLC6-2\_R1\_00001 PJUSBLC6-2\_R2\_00001 PJUSBLC6-2\_S1\_00001 PJUSBLC6-2\_S2\_00001

#### For example :

# RB500V-40\_R2\_00001



Packing Code XX			Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	т	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			





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