

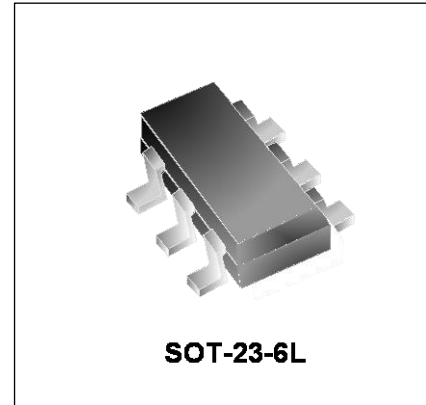


Features

- Low operating voltage: 5V
- Low capacitance
- Solid-state silicon-avalanche and active circuit triggering technology
- Back-drive protection for power-down mode
- Lead-free version available

IEC Compatibility (EN61000-4)

- IEC 61000-4-2 (ESD) $\pm 25\text{kV}$ (air), $\pm 20\text{kV}$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 3A (8/20 μs)



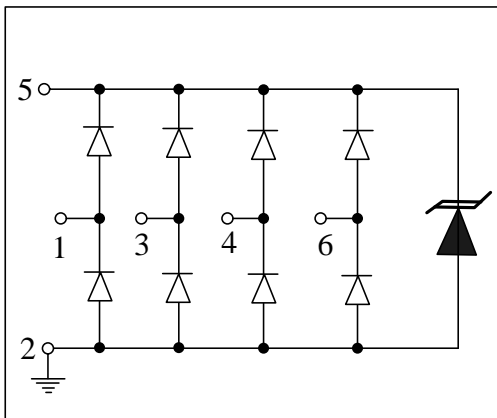
Mechanical Characteristics

- SOT-23-6L package
- Molding compound flammability rating: UL 94V-0
- Marking: Marking Code
- Packaging: Tape and Reel
- RoHS Compliant

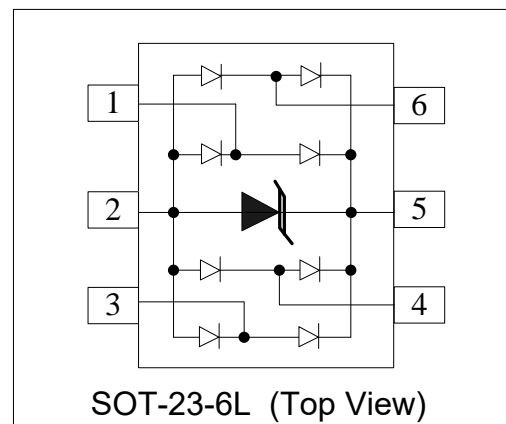
Applications

- Video/Graphics Card
- Digital Visual Interface (DVI)
- USB2.0 Power and Data lines protection
- Notebook and PC Computers
- Monitors and Flat Panel Displays

Circuit Diagram



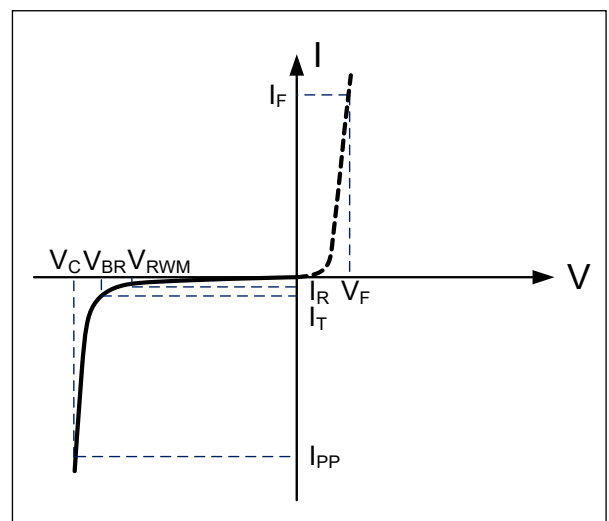
Schematic & PIN Configuration



Absolute Maximum Rating			
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	70	Watts
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	3	A
Operating Temperature	T_J	-55 to + 85	$^{\circ}C$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}C$

Electrical Parameters (T=25 $^{\circ}C$)

Symbol	Parameter
I_{PP}	Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_F	Forward Current
V_F	Forward Voltage @ I_F



Electrical Characteristics

SRV05-4						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RWM}	Pin5 to pin2 T=25 $^{\circ}C$			5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$ Pin 5 to pin2	5.6			V
Reverse Leakage Current	I_R	$V_{RWM}=5V$, T=25 $^{\circ}C$ Pin 5 to pin2			500	nA
Forward Voltage	V_F	$I_T=15mA$		0.8	1.5	V
Clamping Voltage	V_C	$I_{PP}=3.0A$, $t_p=8/20\mu s$ I/O pin to GND			22	V
Junction Capacitance	C_j	$V_R = 0V$, $f = 1MHz$ I/O pin to GND		2.5	3.5	pF
		$V_R = 0V$, $f = 1MHz$ Between I/O pins		1.0	2.0	pF

Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

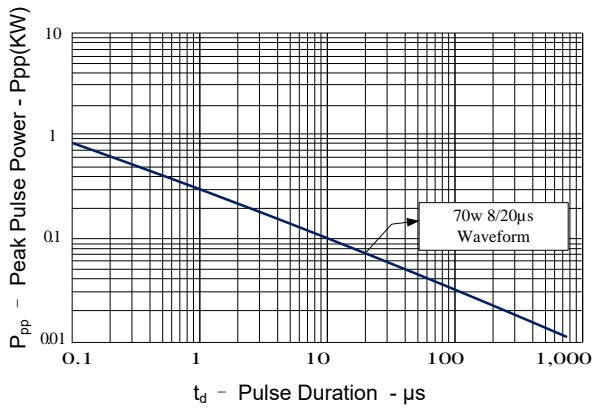


Figure 2: Power Derating Curve

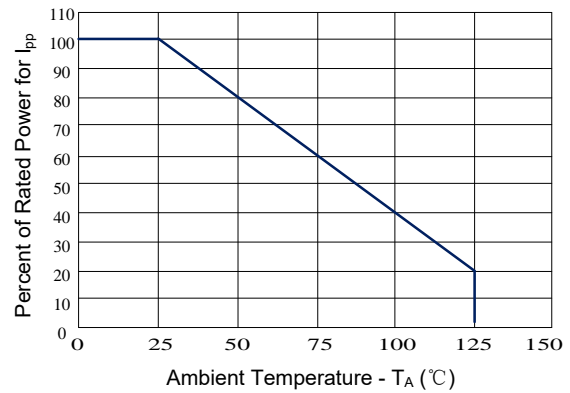


Figure 3: Pulse Waveform

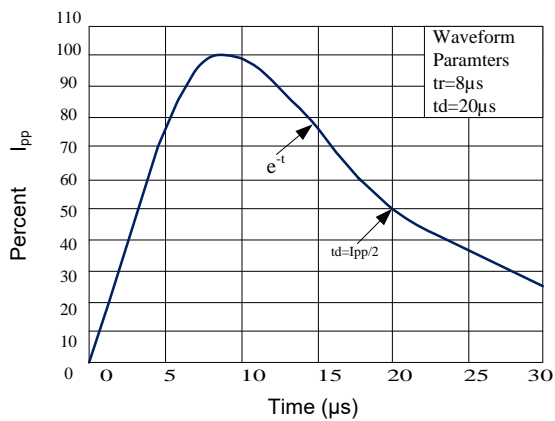


Figure 4: Clamping Voltage vs. Peak Pulse Current

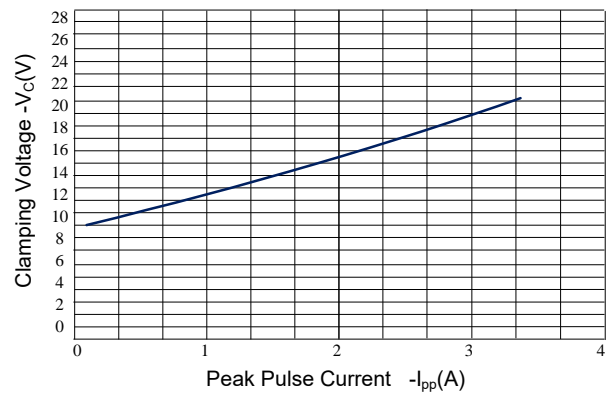


Figure 5: Capacitance vs. Reverse Voltage

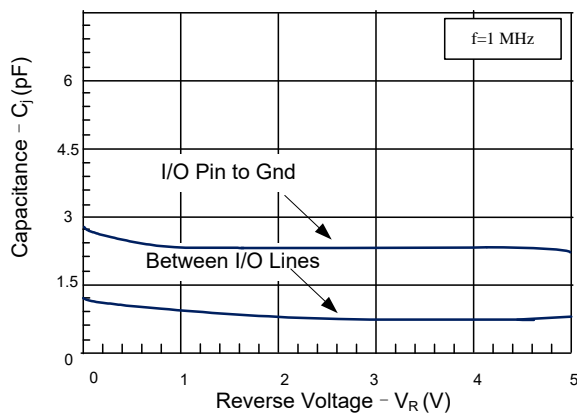
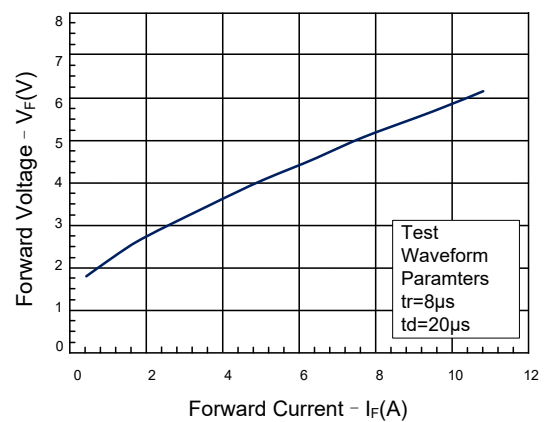
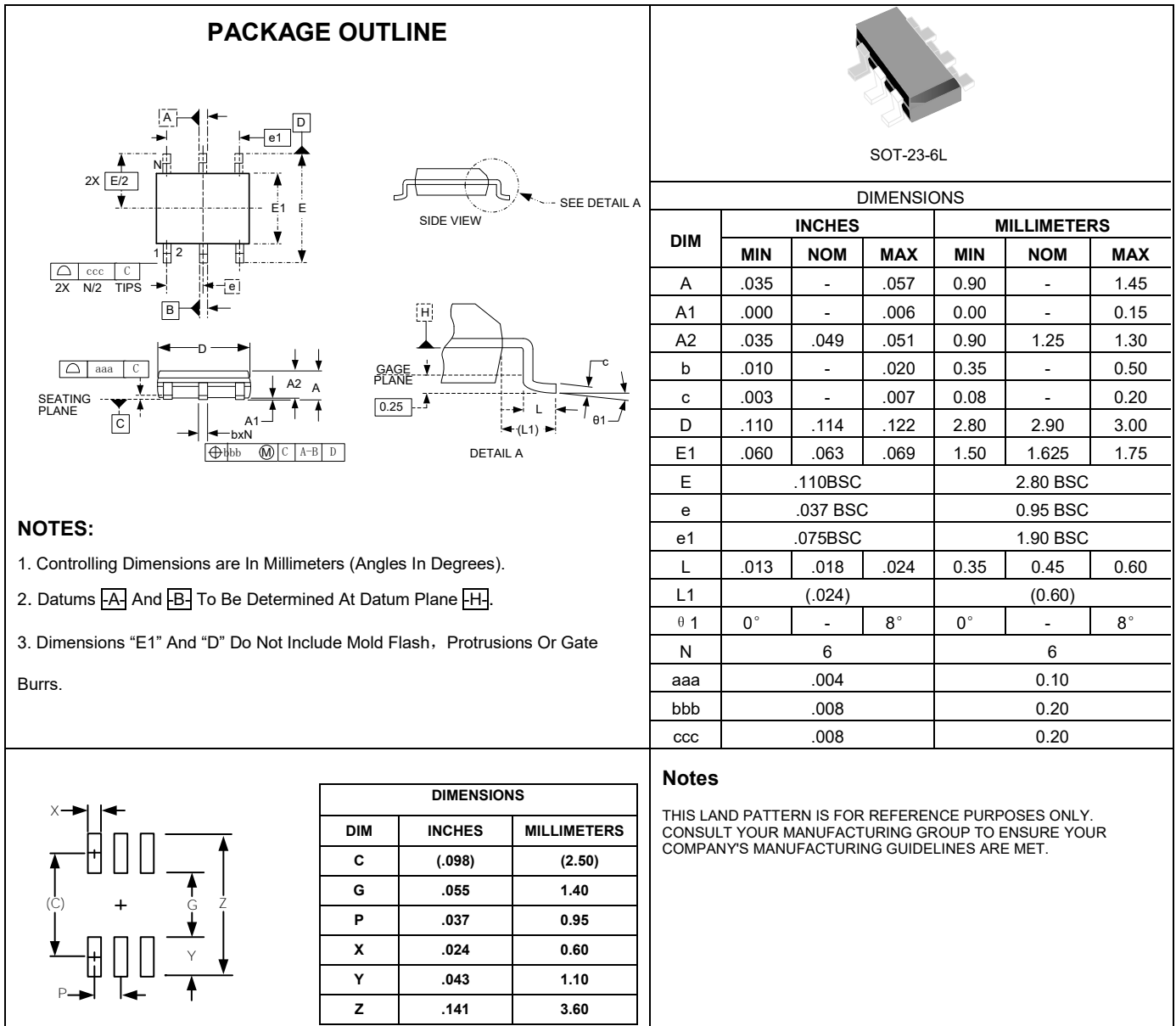


Figure 6: Forward Voltage vs. Forward Current



Outline Drawing – SOT-23-6L



Marking Codes

Part Number	SRV05-4
Marking Code	V5L

Package Information

Qty: 3k/Reel