



RClamp® 0554S

KEY FEATURES

- High surge immunity: $I_{pp}=25A, 8x20\mu s$
- 4-line protection array
- Superior clamping voltage
- Low capacitance: 5pF
- Small package (SOT-23L)

FEATURE BENEFITS

- Protection for lightning, ESD and Cable Discharge
- Ideal for protecting two differential pairs
- Protects sensitive next generation transceivers
- Provides minimal loading to preserve signal integrity
- Footprint compatible with SRV05-4

APPLICATIONS

- USB 2.0 Power and Data Line Protection
- 10/100/1000 Ethernet
- Video Graphics Cards
- Monitors and Flat Panel Displays
- Digital Video Interface (DVI)
- Notebook Computers
- IEEE 1394 Firewire Ports

PACKAGING

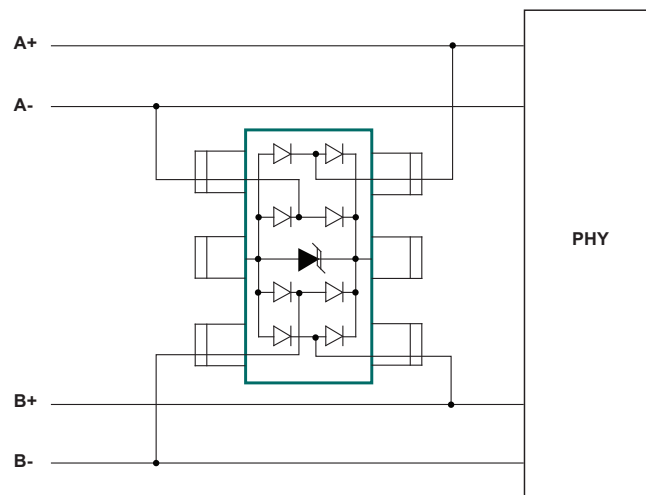
- JEDEC SOT-23 6L



RClamp® 0554S

LOW CLAMPING PERFORMANCE TVS ARRAY FOR ESD, CABLE DISCHARGE & SURGE PROTECTION

The RClamp®0554S's unique design incorporates eight surge rated, low capacitance steering diodes and a TVS diode in a single package. During transient conditions, the steering diodes direct the transient to either the positive side of the power supply line or to ground. The internal TVS diode prevents over-voltage on the power line, protecting any downstream components.



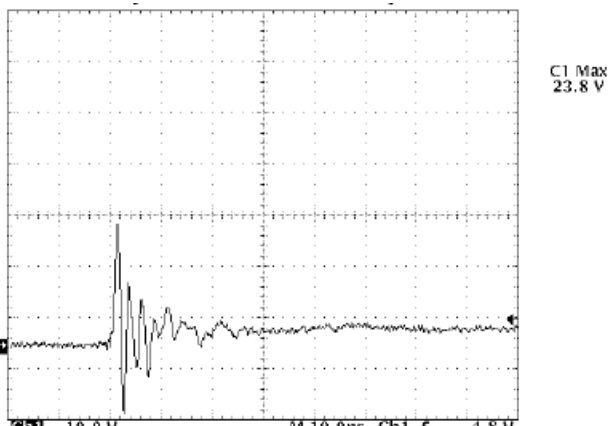
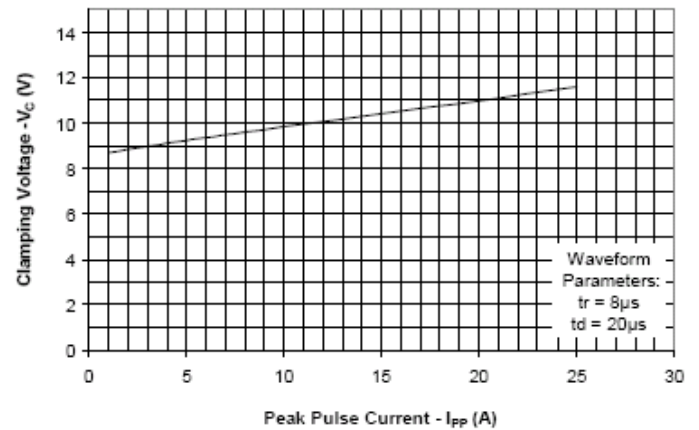
RClamp0554S

RClamp® 0554S - Absolute Maximum Rating

Maximum Rating	Symbol	Value	Unit
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{pk}	375	Watts
Peak Pulse Power ($t_p = 8/20\mu s$)	I_{pp}	25	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	± 30 ± 25	kV
Operating Temperature	T_j	-55 to +125	°C
Storage Temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics (T=25°C)

Parameter	Symbol	Condition	Min	Typ	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}		6			V
Reverse Leakage Current	I_R	$V_{RWM} = 5V, T = 25^\circ C$			0.5	μA
Clamping Voltage	V_C	$I_{pp} = 25A, t_p = 8/20\mu s$			15	V
Junction Capacitance	C_j	Any I/O to Gnd $V_R = 0, f = 1MHz$			5	pF
		I/O to I/O $V_R = 0, f = 1MHz$		3		pF

**ESD CLAMPING
(8KV CONTACT PER IEC 61000-4-2)****SURGE CLAMPING
(TP = 8/20μS)****ORDERING INFORMATION**

RClamp0554S.TCT		
Working Voltage	Qty Per Reel	Reel Size
5V	3,000	7 inches



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