



SRV05-4

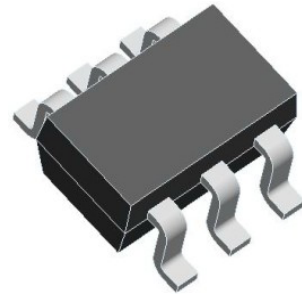
LOW CAPACITANCE TVS ARRAY / ESD ARRAY

FEATURES

- ESD protection for high-speed data lines to IEC 61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
IEC 61000-4-4 (EFT) 40A (5/50ns)
IEC 61000-4-5 (Lightning) 12A (8/20 μs)
- Array of surge rated diodes with internal TVS Diode
- Small package saves board space
- Protects four I/O lines
- Low capacitance: 3pF typical
- Low clamping voltage
- Low operating voltage: 5.0V
- Solid-state silicon-avalanche technology



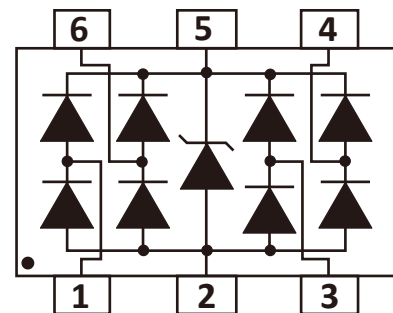
SOT-23-6



APPLICATIONS

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

Pin Configuration



Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

Absolute Maximum Rating			
Rating	Symbol	Value	Units
Peak Pulse Power (t _p = 8/20 μs)	P _{pk}	350	Watts
Peak Pulse Current (t _p = 8/20 μs)	I _{pp}	12	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V _{ESD}	15 8	kV
Lead Soldering Temperature	T _L	260 (10 sec.)	°C
Operating Temperature	T _J	-55 to +125	°C
Storage Temperature	T _{STG}	-55 to +150	°C



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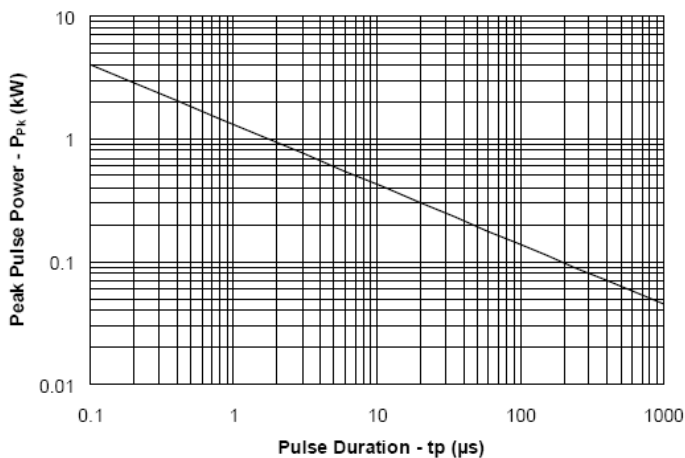
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● Electrical Characteristics(Tamb=25 °C)

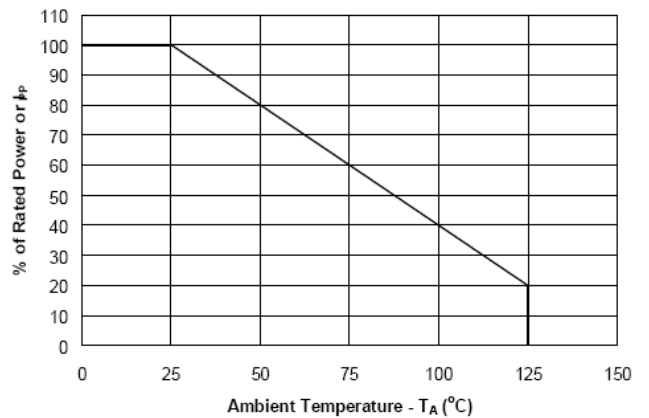
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RWM}	Pin 5 to 2			5	V
Reverse Breakdown Voltage	V_{BR}	$I_t = 1mA$ Pin 5 to 2	6			V
Reverse Leakage Current	I_R	$V_{RWM} = 5V, T=25^{\circ}C$ Pin 5 to 2			5	μA
Forward Voltage	V_F	$I_f = 15mA$			1.2	V
Clamping Voltage	V_C	$I_{PP} = 1A, t_p = 8/20\mu s$ Any I/O pin to Ground			12.5	V
Clamping Voltage	V_C	$I_{PP} = 5A, t_p = 8/20\mu s$ Any I/O pin to Ground			17.5	V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$ Any I/O pin to Ground		3	5	pF
		$V_R = 0V, f = 1MHz$ Between I/O pins		1.5		pF

● Electrical Characteristics Curve

Non-Repetitive Peak Pulse Power vs. Pulse Time



Power Derating Curve

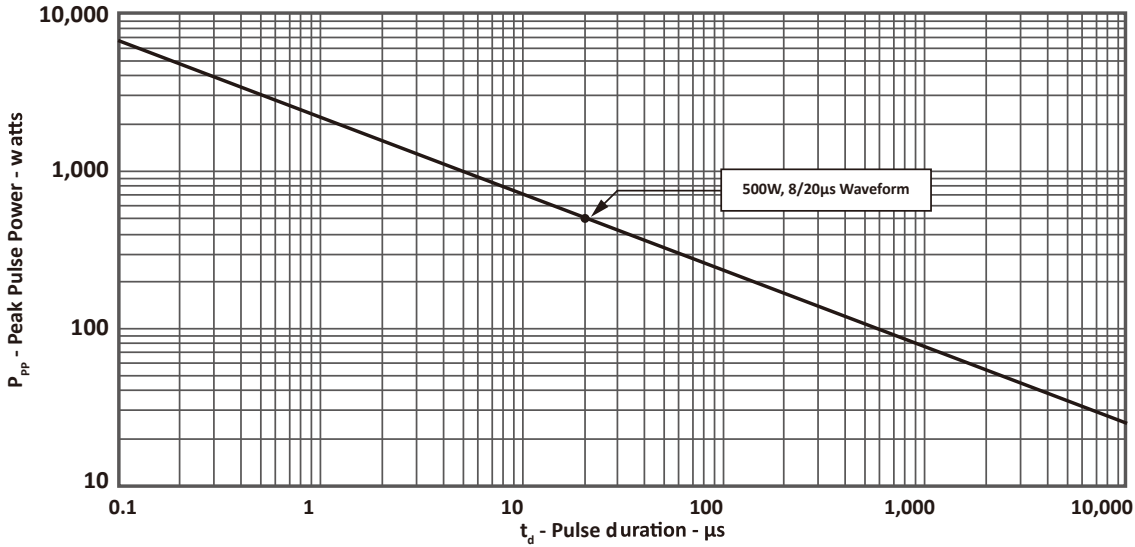




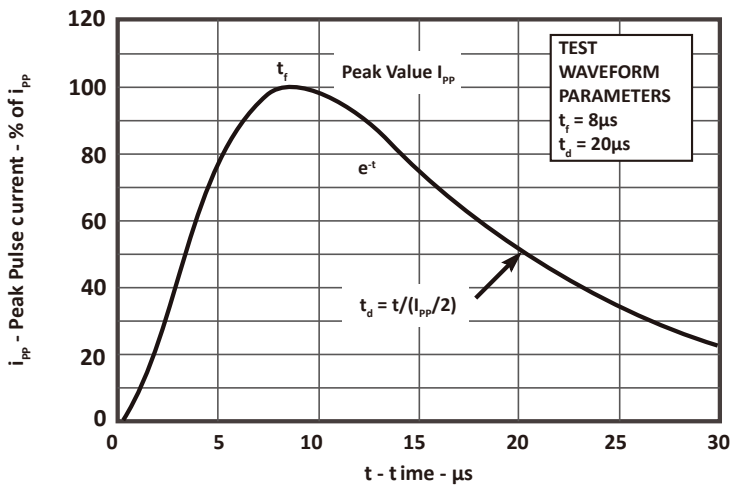
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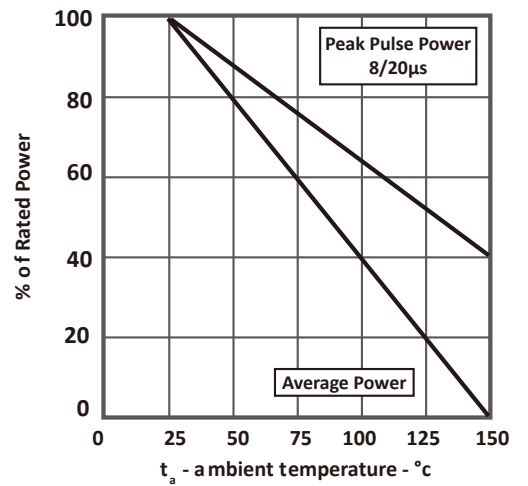
Peak Pulse Power VS Pulse Time



Pulse Waveform



Power Derating Curve

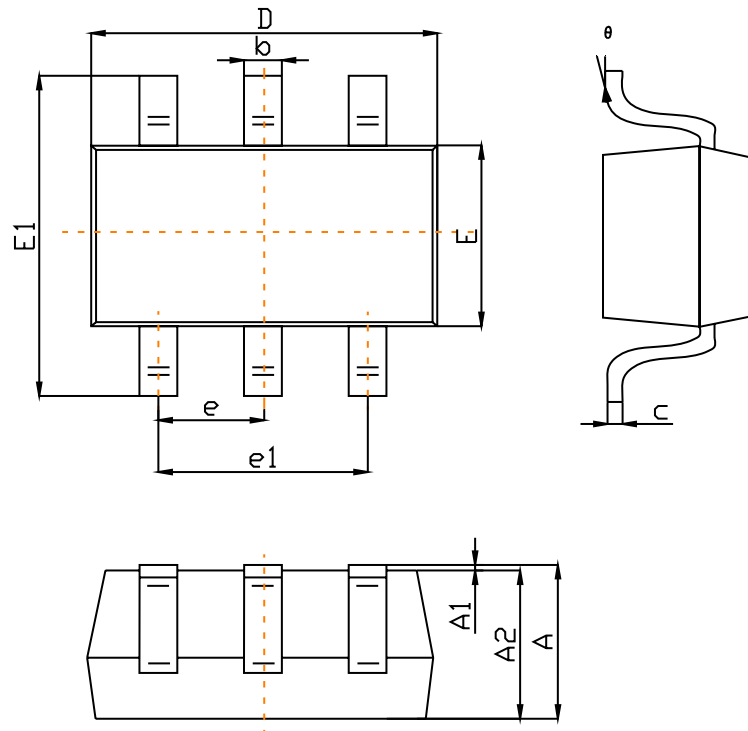




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LOW CAPACITANCE TVS ARRAY / ESD ARRAY

SOT-23-6 PACKAGE OUTLINE DIMENTION



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100		0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E	1.500	1.700	0.059	0.067
E1	2.650	2.950	0.104	0.116
e	0,950(BSC)		0.037(BSC)	
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.012	0.024
	0°	8°	0°	8°