

DESCRIPTION

The SESRV05-4 is a dual USB port protection array that features ultra low capacitance. This device can be used in applications such as video cards, SMART phones, Gigabit Ethernet and other computer interfaces. Designed for ESD protection, the SESRV05-4 can clamp the effects of electrical fast transients on the power bus.

The SESRV05-4 combines 8 low capacitance steering diodes for up to four individual data or transmission lines and one TVS diode for power bus protection. This device is available in the space-saving SOT-23-6 package configuration, which minimizes lead inductance to prevent overshoot voltages during high ESD current events. The SESRV05-4 meets the IEC 61000-4-2, 61000-4-2 and 61000-4-5 requirements.



SOT-23-6 PACKAGE

FEATURES

- >80 Watts peak pulse power($t_p=8/20\mu S$)
- >Protects four I/O lines
- >Low clamping voltage
- >Small package: SOT23-6L
- >Moisture sensitivity level □ Level 1
- >Weight 16 Milligrams (Approximate)

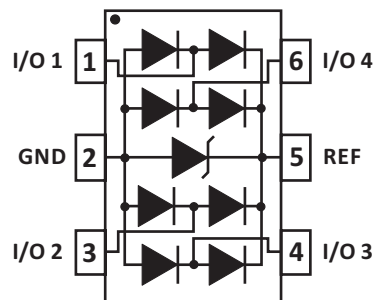
APPLICATIONS

- >USB 2.0 Power and Data Line Protection
- >Video Graphics Cards
- >Monitors and Flat Panel Displays
- >Digit Video Interface (DVI)
- >10/100/1000 Ethernet
- >Notebook Computers
- >ATM Interfaces

IEC COMPATIBILITY

- >IEC 61000-4-2 (ESD) $\pm 15KV$ (air), $\pm 8KV$ (contact)
- >IEC61000-4-4 (EFT) 40A (5/50ns)
- >IEC61000-4-5 (Lightning) 5A (8/20 μs)

PIN CONFIGURATIONS



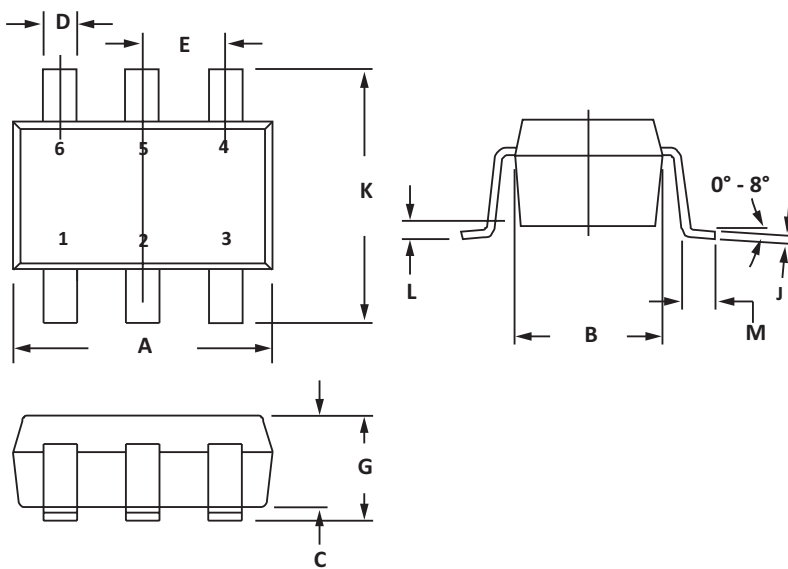
TYPICAL DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C UNLESS OTHERWISE SPECIFIED			
PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power (tp=8/20μs waveform)	PPP	80	Watts
Lead Soldering Temperature	T _L	260(10 sec.)	°C
Operating Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-55~150	°C

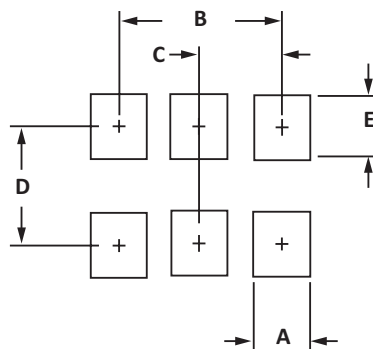
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C UNLESS OTHERWISE SPECIFIED									
PART NUMBER	DEVICE MARKING	V _{RWM} (V) Max.	V _B (V) Min.	I _T (mA)	V _c @1A Max.	V _c		I _R (uA) Max.	C _T (pF) Max.
						Max.	@A		
SESRV05-4	V05	5.0	6.0	1	12.5	17.5	5	1	3

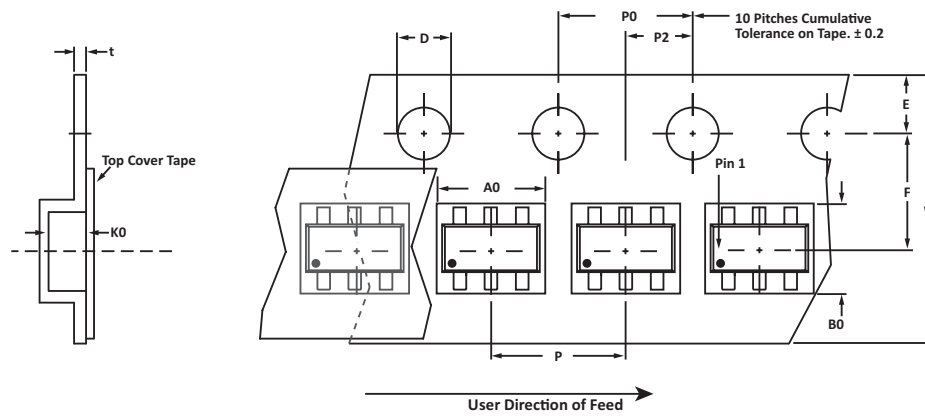
SOT-23-6 PACKAGE INFORMATION

OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.80	3.05	0.110	0.120
B	1.50	1.75	0.059	0.070
C	0.90	1.30	0.036	0.051
D	0.30	0.40	0.012	0.016
E	0.85	1.05	0.033	0.040
G	0.90	1.45	0.036	0.057
J	0.09	0.20	0.003	0.008
K	2.60	3.00	0.102	0.118
L	0.0	0.15	0.0	0.006
M	0.30	0.60	0.012	0.024



PAD LAYOUT DIMENSIONS		
DIM	MILLIMETERS	INCHES
	NOMINAL	NOMINAL
A	0.70	0.028
B	1.90	0.074
C	0.95	0.037
D	2.40	0.094
E	1.00	0.039



TAPE AND REEL

SPECIFICATIONS

REEL DIA.	TAPE WIDTH	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
178mm (7")	8mm	3.20 ± 0.10	3.20 ± 0.10	1.65 ± 0.10	1.50 ± 0.10	1.75 ± 0.10	3.50 ± 0.05	8.00 ± 0.30	4.00 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	0.25

NOTES

1. Dimensions are in millimeters.
2. Surface mount product is taped and reeled in accordance with EIA-481.
3. Suffix - T7 = 7" Reel - 3,000 pieces per 8mm tape.

ORDERING INFORMATION

BASE PART NUMBER (xx = Voltage)	LEAD FREE SUFFIX	TAPE SUFFIX	QTY/REEL	REEL SIZE	TUBE QTY
SESRV05-4	-LF	-T7	3,000	7"	n/a

This device is only available in a Lead-Free configuration.

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