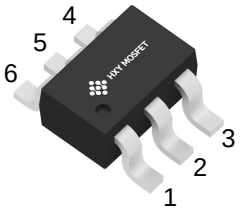
Discription

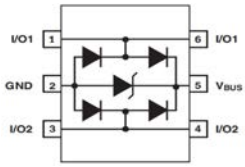
The SRV05-4-P-T7 is a 2-channel ultra low capacitance rail clamp ESD protection diodes array. Each channel consists of a pair of ESD diodes that steer positive or negative ESD current to either the positive or negative rail.A zener diode is integrated in to the array between the positive and negative supply rails.In the typical applications, the negative rail pin (assigned as GND) is connected with system ground. The Positive ESD current is steered to the ground through an ESD diode and Zener diode and the positive ESD voltage is clamped to the zener voltage.



SOT-23-6L

Features

- ★ Protecting 4 unidirectional lines
- ★ Provides ESD protectionto IEC61000-4-2 level 4
  - ±25kV air discharge
  - ±25kV contact discharge
- ★ Low clampingvoltage
- ★ Low operating voltage
- ★ Improved zener structure
- ★ Ultra-low capacitance: 4.3pF Typ
- ★ RoHS compliant.



Circuit Diagram

Ordering Information

Product ID	Pack	Qty(PCS)
SRV05-4-P-T7	SOT-23-6L	3000

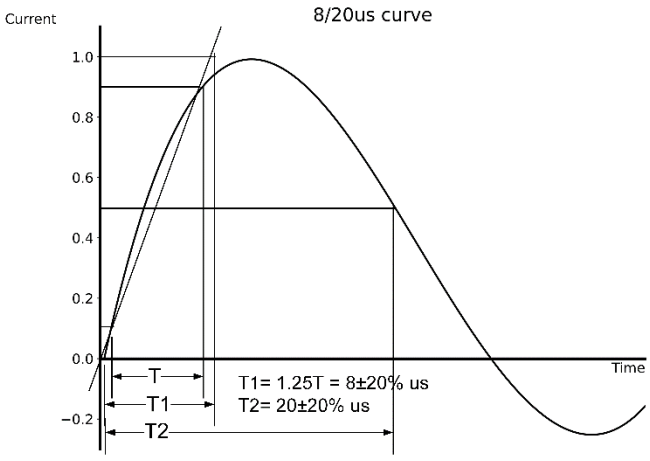
Absolute Ratings(Tamb = 25°C)

Characteristics	Symbol	Ratings	Unit
Peak Pulse Power(8/20μs)	P_{PP}	600	W
Peak Pulse Current(8/20μs)	I_{PP}	6	A
ESD per IEC 61000-4-2(Air)	V_{ESD1}	±25kV	kV
ESD per IEC 61000-4-2(Contact)	V_{ESD2}	±25kV	kV
Operating Temperature Range	Topr	-55 ~ +125	°C
Storage Temperature Range	Tstg	-55 ~ +150	°C

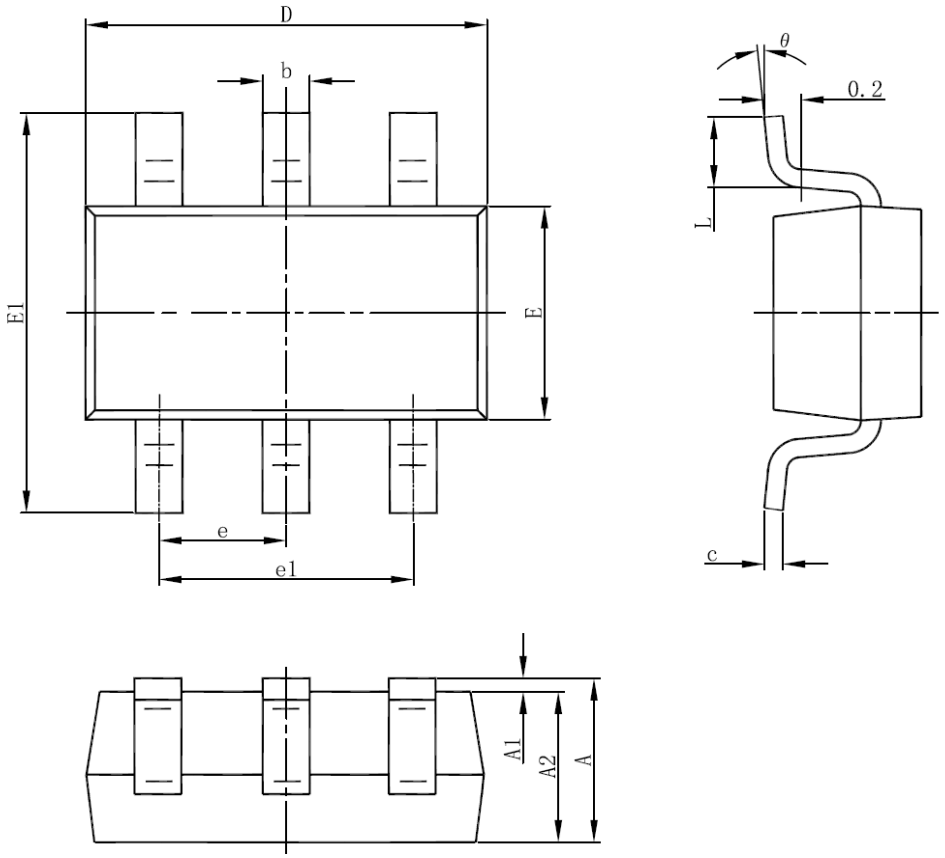
Electrical Characteristics (Tamb=25°C)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				5.0	V
V_{BR}	Reverse Breakdown Voltage	I_T = 1mA	6.0			V
I_R	Reverse Leakage Current	V_{RWM} = 5.0V			1.0	μA
V_C	Clamping Voltage	I_{PP} = 1A, t_p = 8/20μs		9		V
		I_{PP} = 30A, t_p = 8/20μs		15		V
C_J	Junction Capacitance	V_R = 0V, f = 1MHz Any I/O pin to GND		4.3	6.4	pF
C_J	Junction Capacitance	V_R = 0V, f = 1MHz Any I/O pin to I/O		2.0	3.0	pF

Typical Characteristics



SOT-23-6L Package Information



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	0.000	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
θ	0°	8°	0°	8°

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