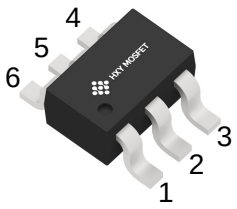
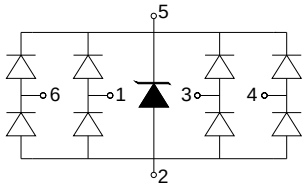
CDSC706-0504C
ESD PROTECTION DIODE

Discription

The CDSC706-0504C is a 4-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-363



Circuit Diagram

Features

- ★ Uni-directional ESD protectionof 4 lines
- ★ IEC 61000-4-2 Level 4 ESD protection
- ★ Low reverse stand−off voltage: 5V
- ★ Low reverse clamping voltage
- ★ Low leakage current
- ★ Fast response time
- ★ Small package saves board space
- ★ RoHS compliant

Ordering Information

Product ID	Pack	Qty(PCS)
CDSC706-0504C	SOT-363	3000

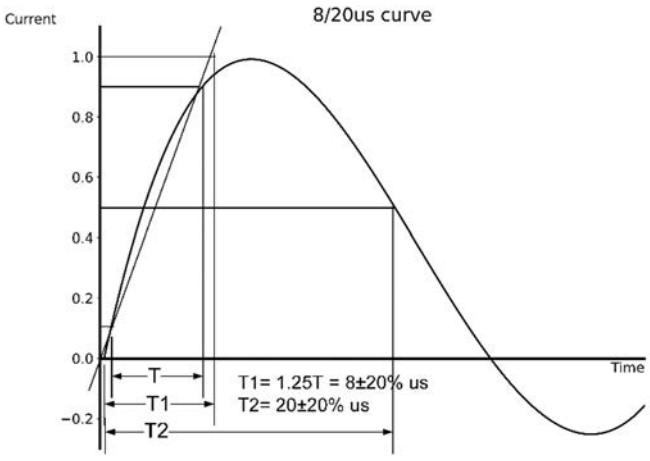
Absolute Ratings(Tamb = 25°C)

Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power (t_p = 8/20μ s)	60	W
T_L	Maximum lead temperature for soldering during 10s	260	°C
T_{stg}	Storage Temperature Range	-55 to +150	°C
T_{op}	Operating Temperature Range	-55 to +150	°C
T_j	Maximum junction temperature	150	°C
	IEC61000-4-2 (ESD) air discharge contact discharge	± 17 ± 12	KV
	IEC61000-4-4 (EFT)	40	A

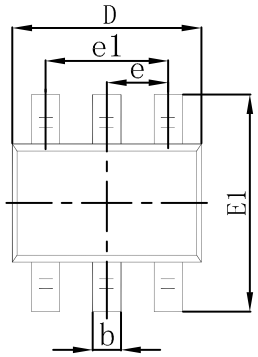
Electrical Characteristics Ratings at 25°C

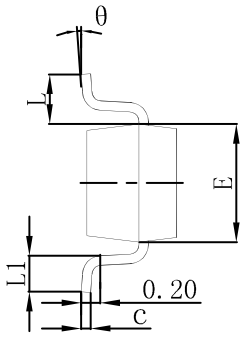
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				5.0	V
V_{BR}	Reverse Breakdown Voltage	I_T = 1mA	6.0			V
I_R	Reverse Leakage Current	V_{RWM} = 5.0V			1.0	μA
V_C	Clamping Voltage	I_{PP} = 1A, t_p = 8/20μs		10		V
		I_{PP} = 4A, t_p = 8/20μs		15		V
C_J	Junction Capacitance	V_R = 0V, f = 1MHz Any I/O pin to GND		0.8		pF
C_J	Junction Capacitance	V_R = 0V, f = 1MHz Any I/O pin to I/O		0.4		pF

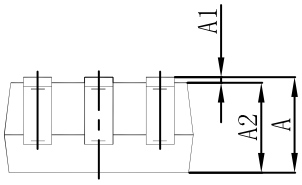
Typical Characteristics



SOT-363 Package Outline Dimensions

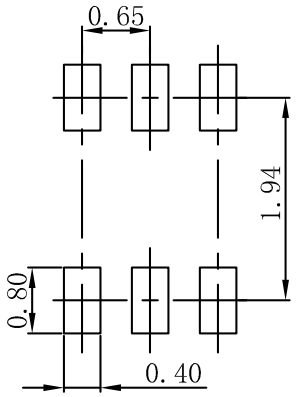






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

SOT-363 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

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