HSC1205-01ETG
ESD PROTECTION DIODE

Discription

The HSC1205-01ETG protects sensitive semiconductor components from damage or upset due to electrostatic discharge (ESD) and other voltage induced transient events.

Excellent clamping capability, low leakage, low capacitance, and fast response time provide best in class protection on designs that are exposed to ESD.

It gives designer the flexibility to protect one bi-directional line in applications where arrays are not practical.

DFN1006-2L
(SOD-882)

Features

★ Low Leakage
★ Response Time is Typically < 1 ns
★ ESD Rating of Class 3 per Human Body Model
★ IEC61000−4−2 Level 4 ESD Protection
★ These are Pb−Free Devices
★ We declare that the material of product compliance with RoHS requirements and Halogen Free.

Circuit Diagram

Ordering Information

Product ID	Pack	Qty(PCS)
HSC1205-01ETG	DFN1006-2L(SOD-882)	10000

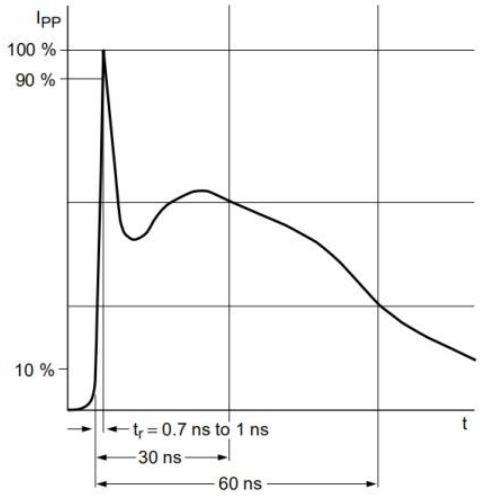
Absolute Ratings(Tamb = 25°C)

Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power (t_p = 8/20μs)	90	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	-40 to +125	°C
T_j	Maximum junction temperature	150	°C
	IEC61000-4-2 (ESD) air discharge contact discharge	±30 ±30	KV

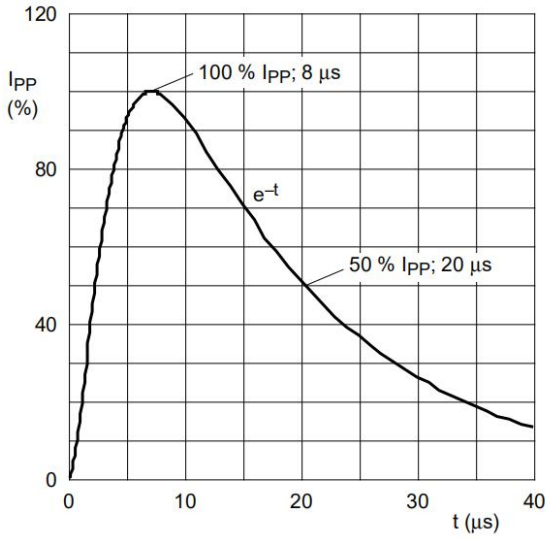
Electrical Characteristics

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				5.0	V
V_{BR}	Reverse Breakdown Voltage	I_T = 1mA	5.8		8.2	V
I_R	Reverse Leakage Current	V_{RWM} = 5.0V			100	nA
V_C	Clamping Voltage	I_{PP} = 9A, t_p = 8/20μs			10	V
C_J	Junction Capacitance	V_R = 0V, f = 1MHz		15	20	pF

Typical Characteristics

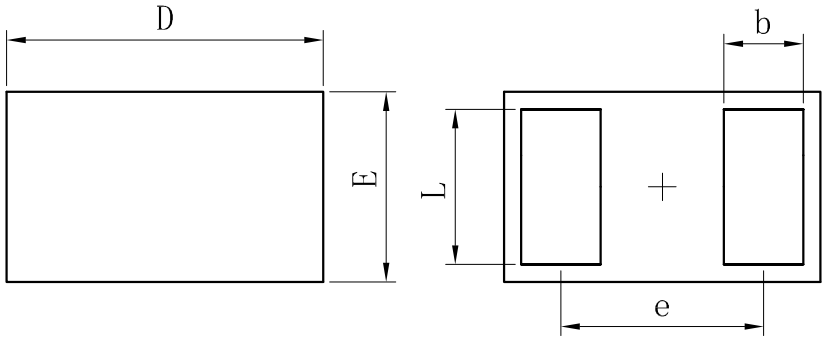


IEC61000−4−2 Waveform

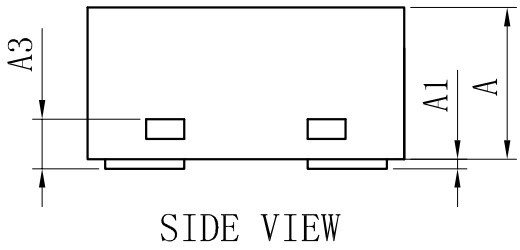


IEC 61000-4-5 Waveform(8/20μs pulse)

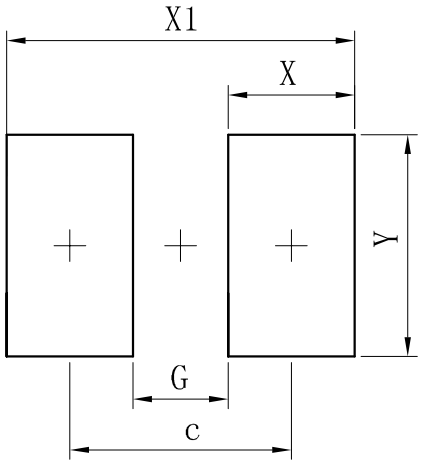
Outline and Dimensions



DFN1006-2L(SOD-882)			
Dim	Min	Typ	Max
D	0.95	1.00	1.05
E	0.55	0.60	0.65
e	-	0.64	-
L	0.44	0.49	0.54
b	0.20	0.25	0.30
A	0.43	0.48	0.53
A1	0	-	0.05
A3	0.127REF.		
All Dimensions in mm			



Soldering Footprint



Dimensions	(mm)
c	0.70
G	0.30
X	0.40
X1	1.10
Y	0.70

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