

1. Description

The ESD5341N Series is designed to protect voltage sensitive components from damage or latch-up due to ESD. Excellent clamping capability, low leakage, and fast response time provide best in class protection on designs that are exposed to ESD for board level. Because of its small size and uni-directional design, it is ideal for use in cellular phones, MP3 players, and portable applications that require audio line protection.

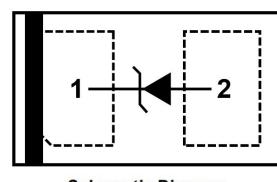
2. Features

- Low Capacitance 0.70 pF
- Low Clamping Voltage: $V_c=15V$ @ $I_{PP}=4A$
- Reverse Working (Stand-off) Voltage: 5.0V
- Low Leakage
- Response Time is Typically < 1 ns
- IEC61000-4-2 Level 4 ESD Protection

3. Applications

- Blu-ray and DVD recorders and players
- Set-top boxes and game consoles
- Keypads, Side Keys, LCD Displays

4. Pinning Information



Schematic Diagram

DFN1006-2L(Pb-Free)



5. Absolute Maximum Ratings

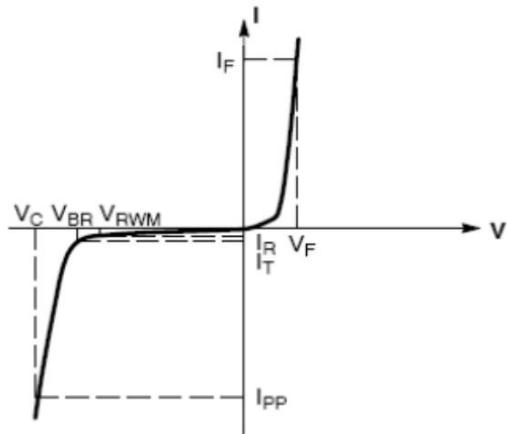
Parameter	Symbol	Value	Units
Peak pulse power ($tp = 8/20\mu s$)	P_{PK}	60	W
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 20	kV
ESD according to IEC61000-4-2 contact discharge		± 20	kV
Operating Temperature Range	T_J	-55 to 125	°C
Storage temperature	T_{STG}	-55 to 150	°C

6. Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6		8.6	V
Forward Voltage Drop	V_F	$I_F=10mA$			1.2	V
Reverse Leakage Current	I_R	$V_{RWM}=5.0V$			100	nA
Clamping Voltage	V_C	$I_{PP}=1A, tp=8/20\mu s$			10	V
		$I_{PP}=4A, tp=8/20\mu s$			15	V
Junction Capacitance	C_J	$V_R=0 V, f=1MHz$		0.7	0.9	pF

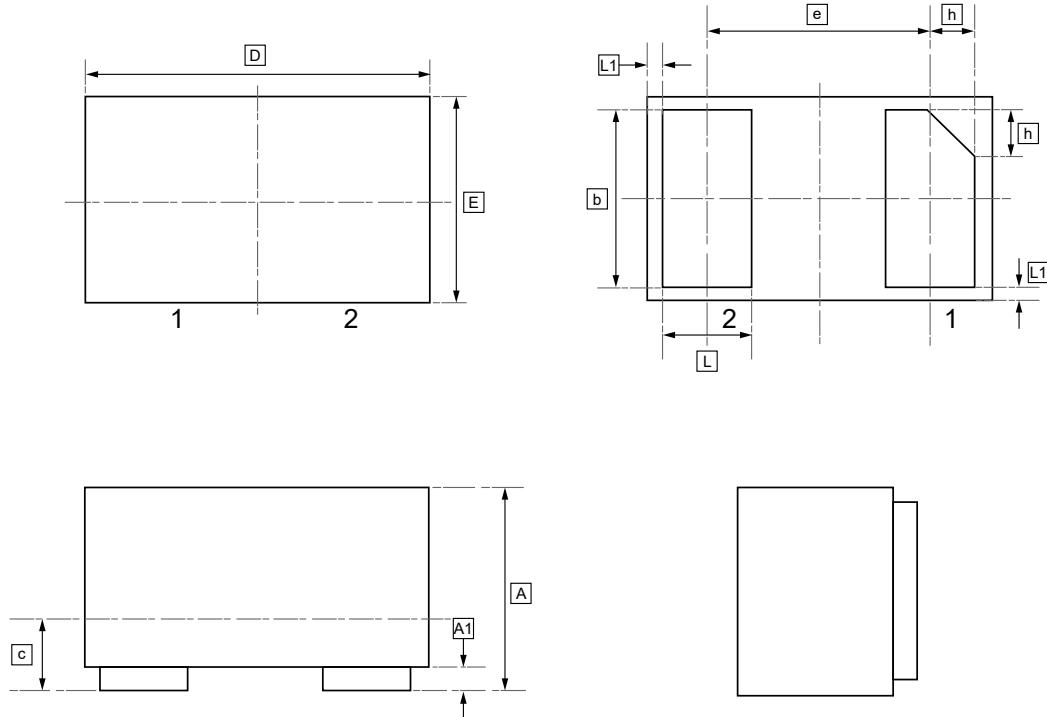


7. Electrical Parameters



Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T
P_{PK}	Peak Power Dissipation
C	Max. Capacitance @ $V_R=0$ and freq.=1 MHz

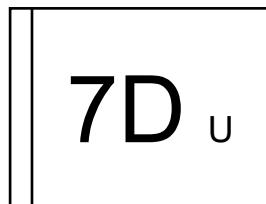
8.DFN1006-2L Package Outline Dimensions



DIMENSIONS (mm are the original dimensions)

Symbol	A	A1	b	c	D	e	E	L	L1	h
Min	0.45	0.00	0.45	0.12	0.95	0.65	0.55	0.20	0.05	0.07
Max	0.55	0.05	0.55	0.18	1.05	BSC	0.65	0.30	REF	0.17

9.Ordering Information



Order Code	Package	Base QTY	Delivery Mode
UMW ESD5341N	DFN1006-2	10000	Tape and reel



10.Disclaimer

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