



ESD



TVS



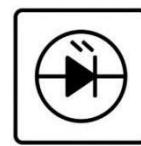
TSS



MOV



GDT



PLED

ESDA05CP

Product specification

FEATURES

- Capacitance: 15pF(typ.)
- Reverse Working Voltage: 5V
- IEC 61000-4-2 (ESD Air): $\pm 25\text{KV}$
- IEC 61000-4-2 (ESD Contact): $\pm 25\text{KV}$
- IEC 61000-4-5 (Lightning 8/20 μs): 8A

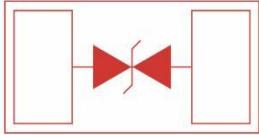
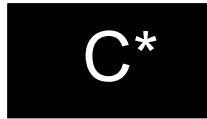
MACHANICAL DATA

- DFN1006-2L package
- Flammability Rating: UL 94V-0
- Packaging: Tape and Reel
- High temperature soldering guaranteed: 260°C/10s
- Reel size: 7 inch

APPLICATIONS

- Smart Phone and Tablet PC
- TV and Set Top Box
- Wearable Devices
- PDA

Reference News

PACKAGE OUTLINE	PIN CONFIGURATION	Marking
		
DFN1006-2L		

ABSOLUTE MAXIMUM RATING

Symbol	Parameter	Conditions	Min	Max	Unit
VESD	Electrostatic Discharge Voltage	IEC 61000-4-2; Contact Discharge	-	± 25	V
		IEC 61000-4-2; Air Discharge	-	± 25	V
PPP	Peak Pulse Power	$tP = 8/20 \mu s$	-	80	W
IPPM	Rated Peak Pulse Current	$tP = 8/20 \mu s$	-	8	A
TA	Ambient Temperature Range	-	-55	125	°C
Tstg	Storage Temperature Range	-	-55	150	°C

ELECTRICAL CHARACTERISTICS (Tamb=25 °C)

Symbol	Parameter	Conditions	Min	Typ.	Max	Unit
VRWM	Reverse Working Voltage	TA = 25 °C	-	-	5.0	V
VBR	Breakdown Voltage	$IR = 1mA$; TA = 25 °C	5.6	6.5	8.4	V
IR	Reverse Leakage Current	VRWM = 5V; TA = 25 °C	-	-	0.1	A
VC	Clamping Voltage	IPP=1A, $tP = 8/20\mu s$	-	-	6	V
		IPP=8A, $tP = 8/20\mu s$	-	-	10	V
CJ	Junction Capacitance	$VR = 0V$, f = 1 MHz	-	15	18	F

ELECTRICAL CHARACTERISTICS CURVE

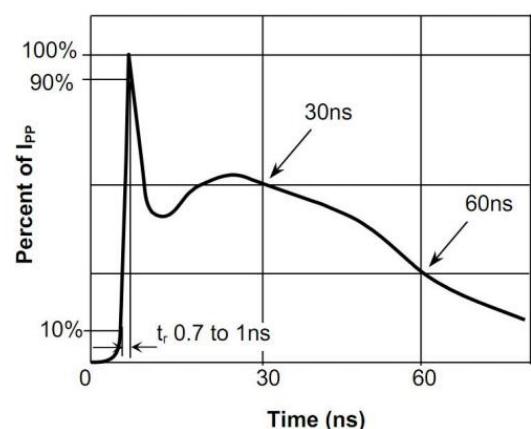


Fig.1 Pulse Waveform-ESD (IEC61000-4-2)

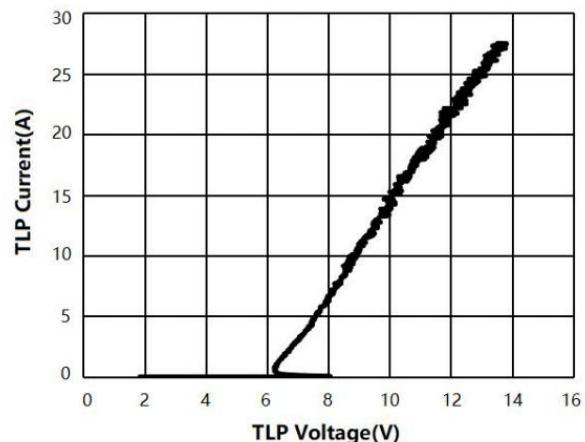


Fig.2 Transmission Line Pulse (TLP)

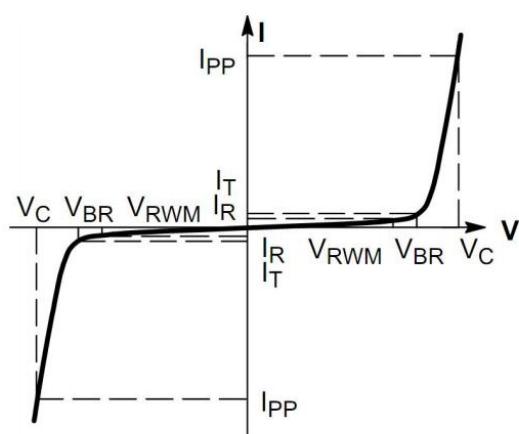


Fig.3 V-I Characteristics for Bidirectional Diode

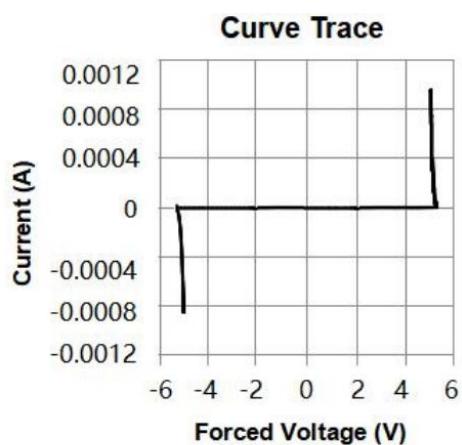


Fig.4 IV Curve

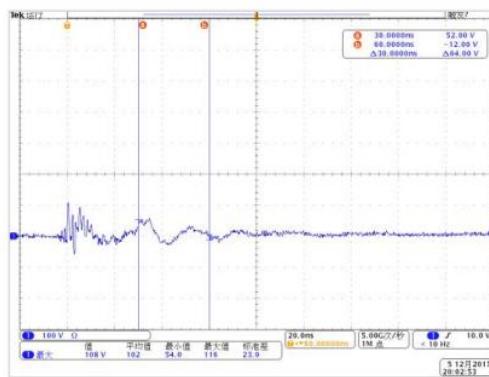


Fig.5 Clamping Voltage at IEC61000-4-2
+8kV Pulse Waveform

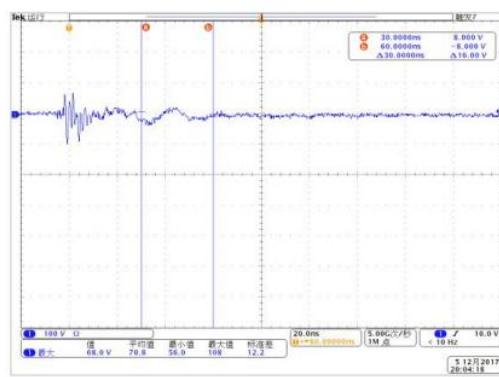
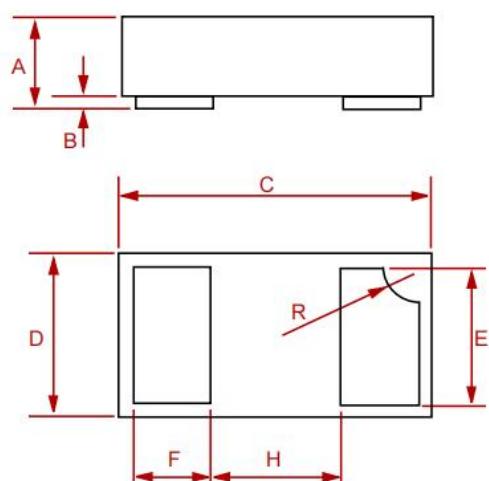
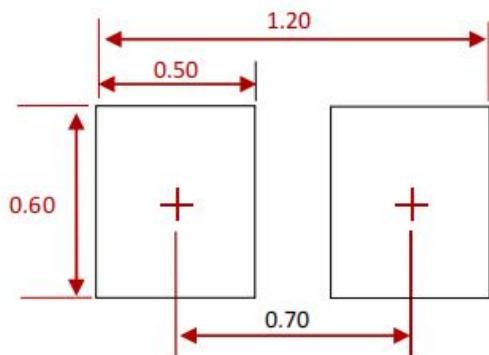


Fig.6 Clamping Voltage at IEC61000-4-2
-8kV Pulse Waveform

PACKAGE MECHANICAL DATA


Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.0125	0.02	0.32	0.52
B	0.000	0.002	0.00	0.05
C	0.037	0.043	0.95	1.080
D	0.022	0.027	0.55	0.680
E	0.016	0.024	0.40	0.60
F	0.008	0.012	0.20	0.30
H	0.015Typ.		0.40Typ.	
R	0.001	0.005	0.05	0.15

Suggested Pad Layout

NOTES:

1. CONTROLLING DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
2. THIS LAND PATTERN IS FOR REFERENCE PURPOSES ONLY. CONSULT YOUR MANUFACTURING GROUP TO ENSURE YOUR COMPANY'S MANUFACTURING GUIDELINES ARE MET.

REEL SPECIFICATION

P/N	PKG	QTY
ESDA05CP	DFN1006-L	10000

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