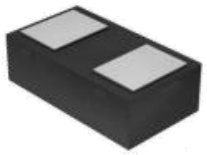
1. Features

- Capacitance: 10pF(typ.)
- Reverse Working Voltage:3.3V
- IEC 61000-4-2 (ESD Air): ±20KV
  IEC 61000-4-2 (ESD Contact): ±20KV
  IEC 61000-4-5 (Lightning 8/20μs): 8.0A

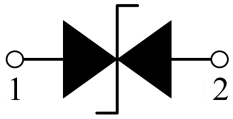
2. Pin Description



3. Applications

- Cellular phones
- Portable devices
- Digital cameras
- Power supplies

4. Schematic Diagram



5. Order Information

Type	Package	Size (mm)	Delivery Form	Delivery Quantity
KUUESDNC2FD3V3BS	DFN1006	1.00x0.60x0.40	7" T&R	10,000

6. Limiting Values(T_A = 25 °C, unless otherwise specified)

Symbol	Parameter	Conditions	Min	Max	Unit
V_{ESD}	Electrostatic Discharge Voltage	IEC 61000-4-2; Contact Discharge	-	±20	kV
		IEC 61000-4-2; Air Discharge	-	±20	kV
P_{PP}	Peak Pulse Power	t_P = 8/20 μs	-	110	W
I_{PPM}	Rated Peak Pulse Current	t_P = 8/20 μs	-	8.0	A
T_A	Ambient Temperature Range	-	-55	125	℃
T_{stg}	Storage Temperature Range	-	-55	150	℃

7. Electrical Characteristics(T_A = 25 °C, unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ.	Max	Unit
V_{RWM}	Reverse Working Voltage	T_A = 25 °C	-	-	3.3	V
V_{BR}	Breakdown Voltage	I_R = 1mA; T_A = 25 °C	3.5	5.5	6.45	V
I_R	Reverse Leakage Current	V_{RWM} = 3.3V; T_A = 25 °C	-	-	0.1	uA
V_C	Clamping Voltage	I_{PP}=1A, t_P =8/20μs	-	-	6	V
		I_{PP}=8.0A, t_P =8/20μs	-	-	14	V
C_J	Junction Capacitance	V_R = 0V, f = 1 MHz	-	10	15	pF

8. Typical Characteristics

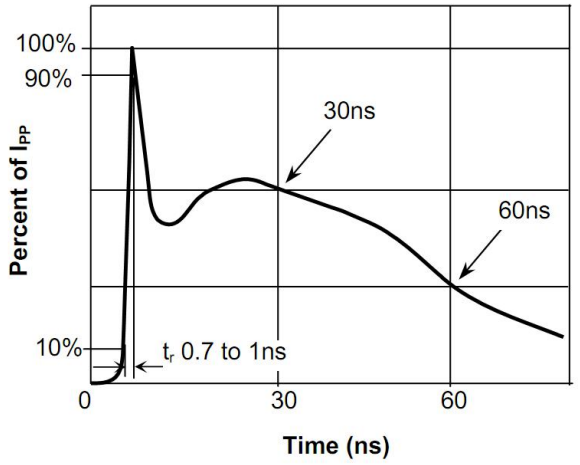


Fig.1 Pulse Waveform-ESD (IEC61000-4-2)

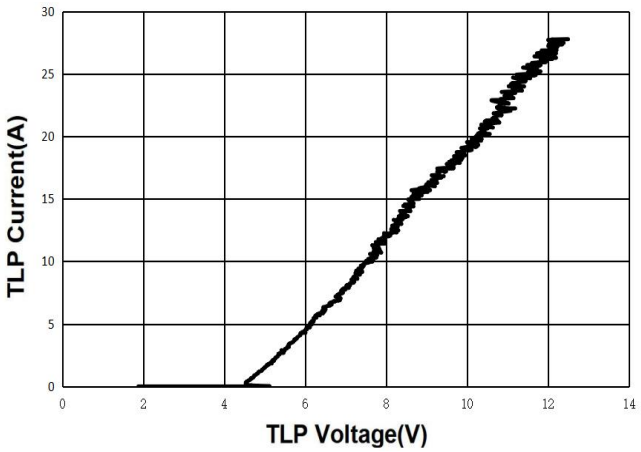


Fig.2 Transmission Line Pulse (TLP)

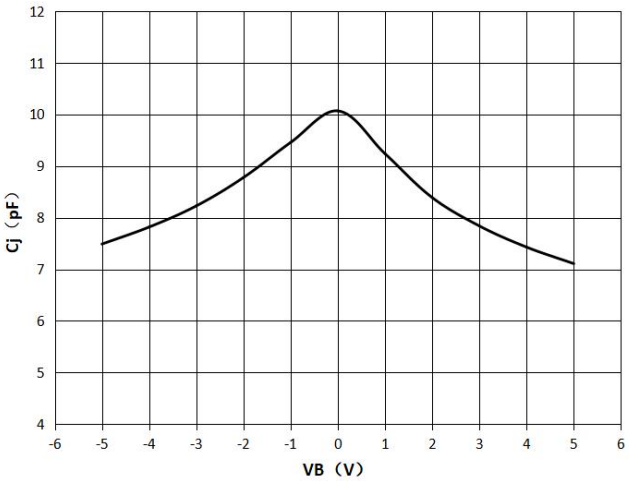


Fig.3 Capacitance vs. Reveres Voltage

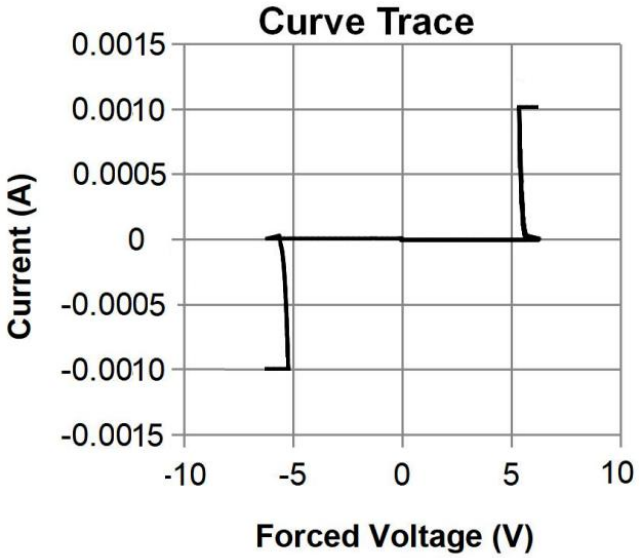
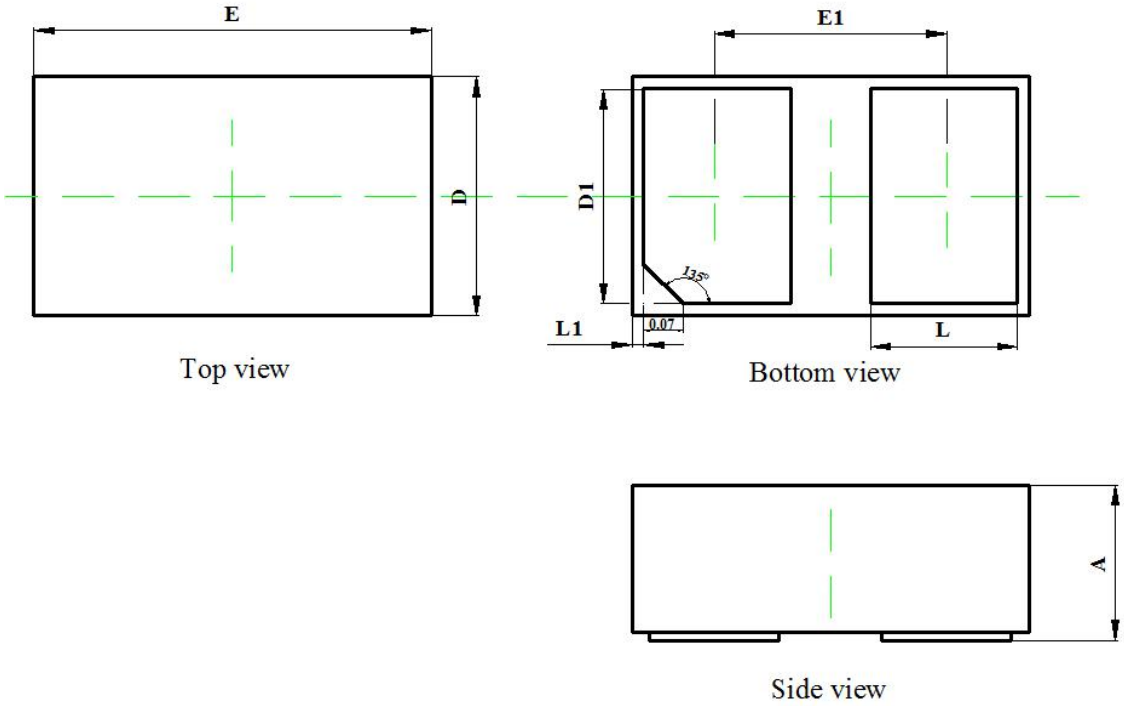


Fig.4 IV Curve（ Forward Voltage）

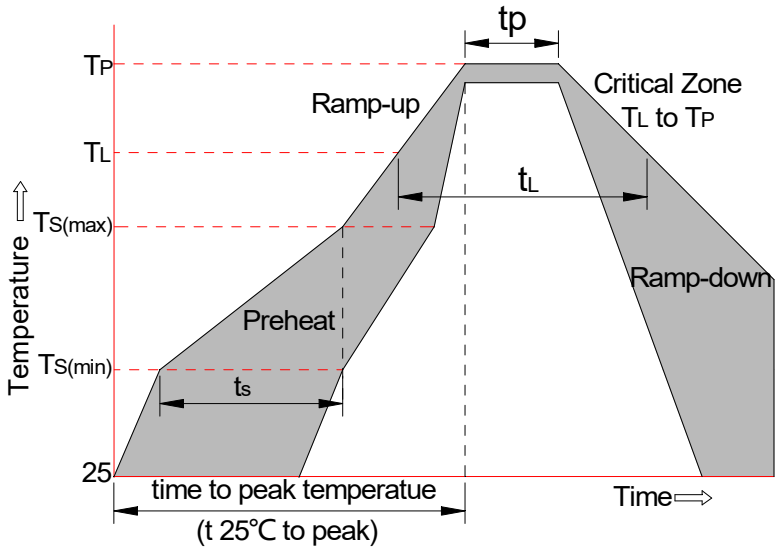
9. Package Outline Dimensions

DFN1006 Package Outline



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.350	0.450	0.014	0.018
D	0.550	0.650	0.022	0.026
E	0.950	1.050	0.037	0.041
D1	0.420	0.520	0.017	0.020
E1	0.550	0.650	0.022	0.026
L	0.270	0.370	0.011	0.015
L1	0.000	0.100	0.000	0.004

10. Soldering Parameters



Reflow Condition		Pb-Free Assembly
Pre-heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217°C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_p)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6°C/sec. Max
xTime 25°C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260°C