

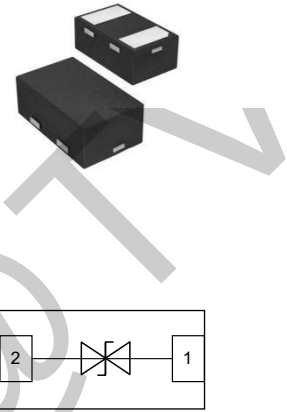
Features

- Standard Capacitance 0.35 pF
- Low Clamping Voltage: $V_C=15V$ @ $I_{PP}=4.0A$
- Reverse Working Voltage: 5.0V
- Low Leakage current
- Response Time < 1 ns
- Bi-directional ESD protection

Mechanical Data

- Package: DFN0603-2L (0.6 x 0.3 mm)
- Marking: U5
- Reel: 7", 10,000 pcs / Tape & Reel
- Pb-Free, RoHS compliant

DFN0603-2L



Applications

- Smartphones, tablet computers
- Blu-ray and DVD recorders and players
- Video equipment and accessories

Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
DCE5VU06B	U5	DFN0603-2L	Tape and reel	10000pcs / reel	EIA STD RS-481

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu s$)	P_{PP}	60	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	$\pm 20/\pm 20$	kV
Peak Pulse Current ($T_P = 8/20\mu s$)	I_{PP}	4	A
Junction Temperature	T_J	-40~85	°C
Operation temperature	T_{OP}	-40~85	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

 (T_A = 25 °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V _{RWM}		-	-	5.0	V
Holding Voltage	V _{BR}	I _T = 1mA	6.0	-	9.0	V
Reverse Leakage Current	I _R	V _{RWM} = ±5.0V	-	-	100	uA
Clamping Voltage	V _C	I _{PP} = 1A, t _p =8/20μs	-	-	10	V
Clamping Voltage	V _C	I _{PP} = 4A, t _p =8/20μs	-	-	15	V
Junction Capacitance	C _J	V _R =0V, f=1MHz	-	0.35	-	pF

Typical Performance Characteristics (TA=25°C unless otherwise Specified)

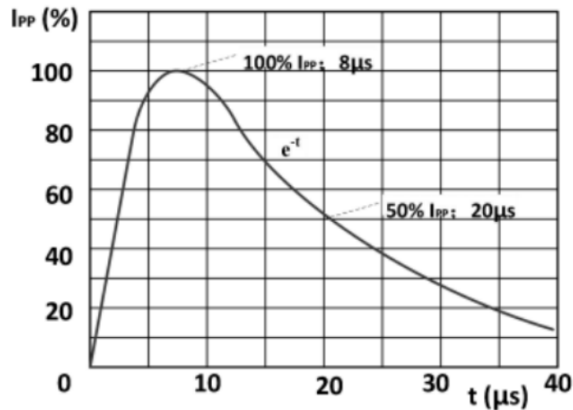


Fig. 1. 8/20 μ s pulse waveform according to IEC 61000-4-5 and IEC 61643-3-21

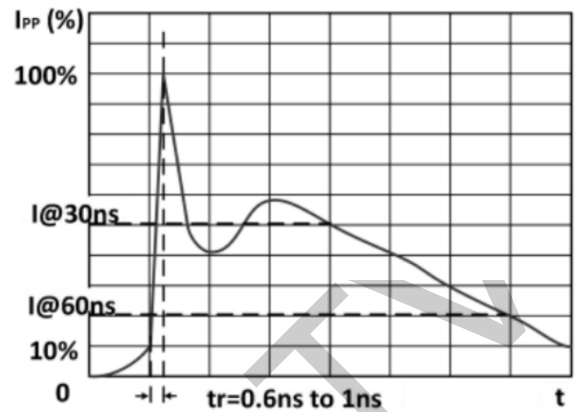


Fig. 2. ESD pulse waveform according to IEC 61000-4-2

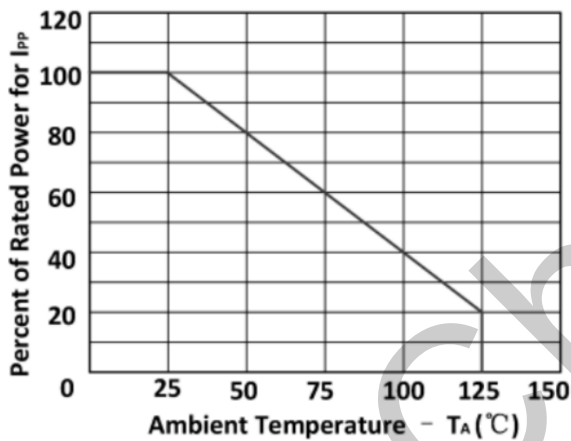


Fig. 3. Power Derating Curve

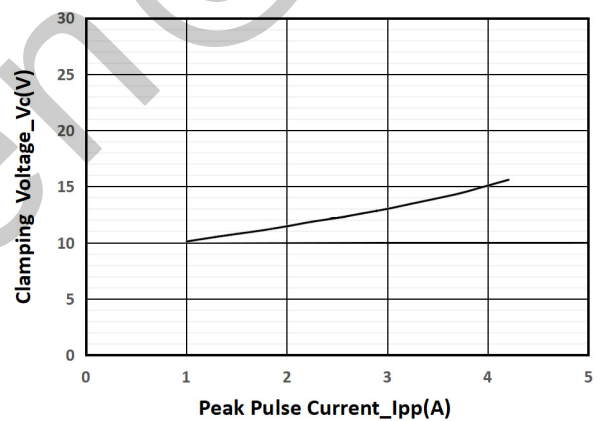


Fig. 4. Peak Pulse Current vs Clamping Voltage

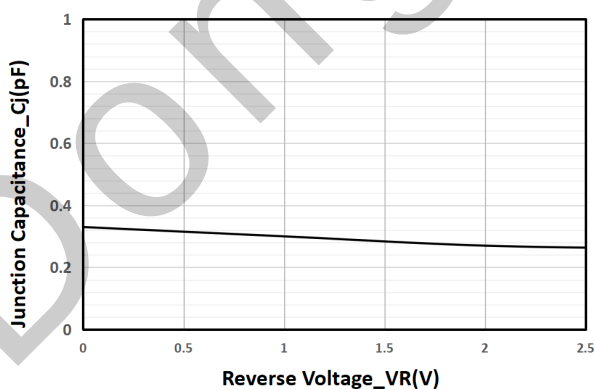


Fig. 5. Junction Capacitance vs Reverse Voltage

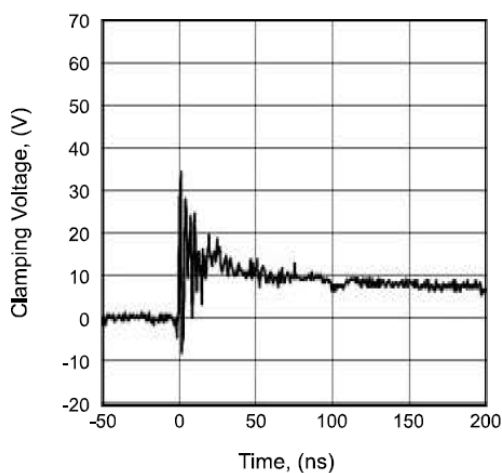


Fig.6 - ESD Clamping
(+8kV Contact per IEC 61000-4-2)

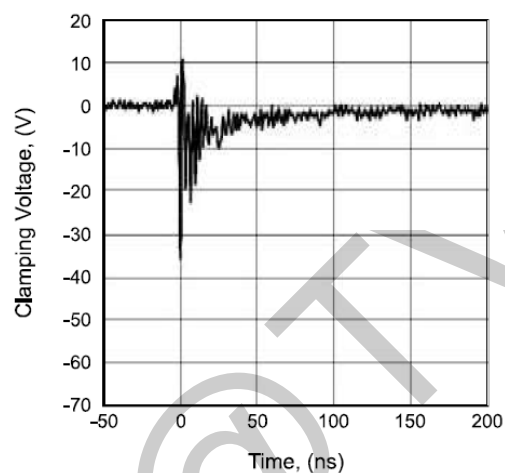
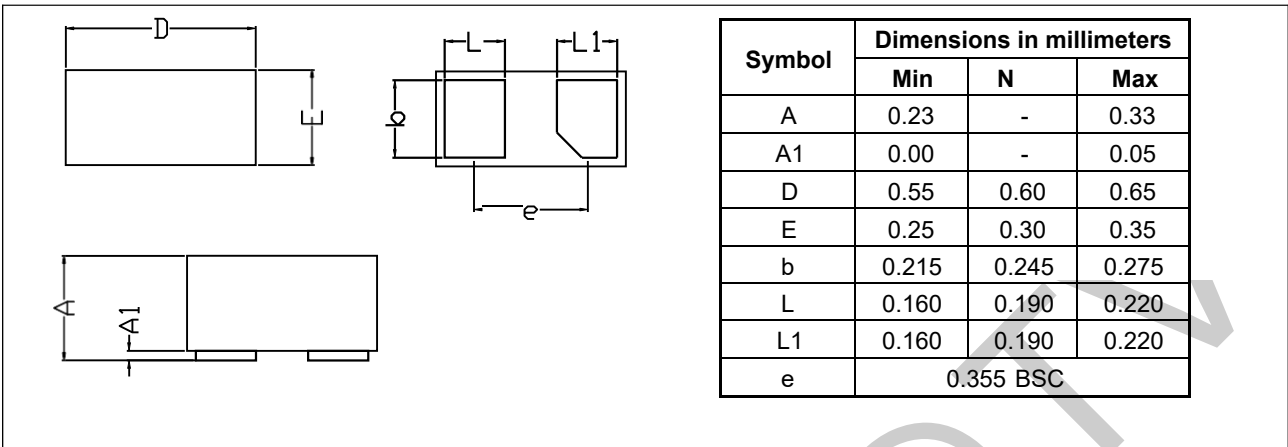
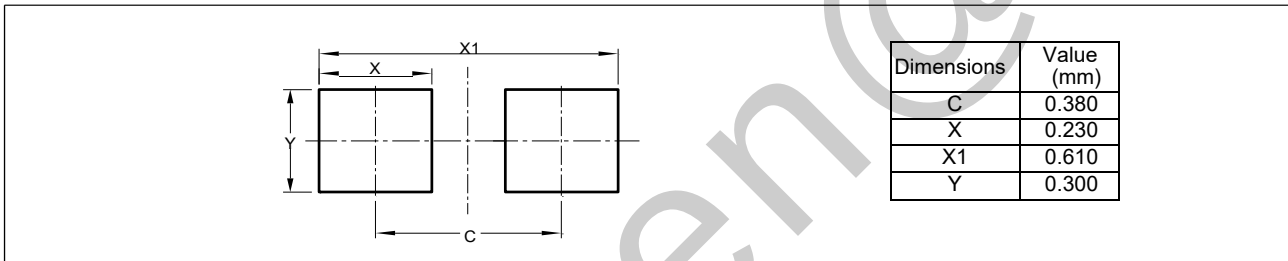


Fig.7 - ESD Clamping
(-8kV Contact per IEC 61000-4-2)

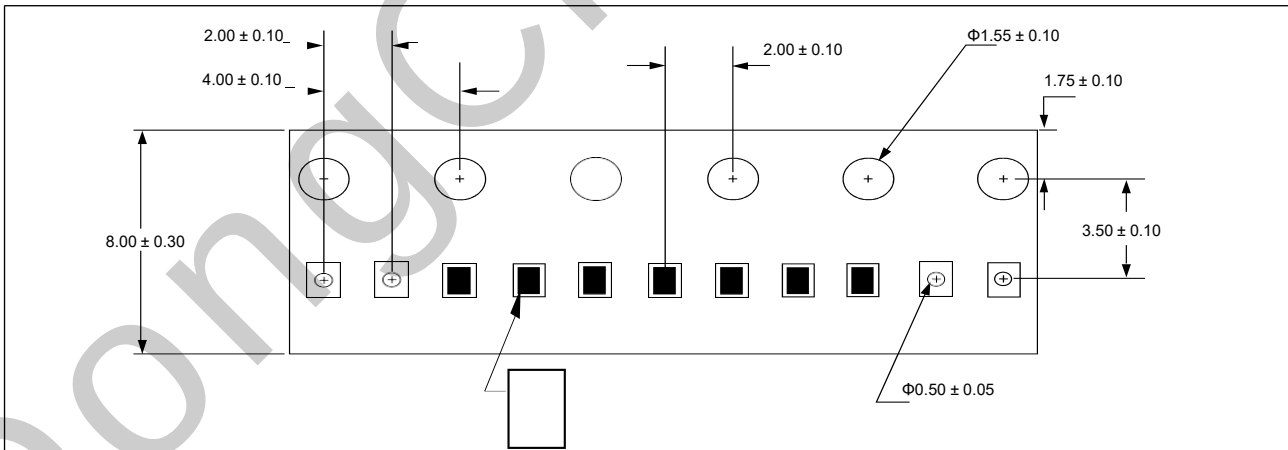
Package Dimensions



Pad Dimensions



Package Information



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The products listed in this document are designed to be used with ordinary electronic equipment or devices.

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Head Office

Contact Information:

DongChen Electronics Co.,Ltd.

Address: 2F., No.407, Sec. 2, Longgang Rd.,Zhongli Dist.,
Taoyuan City 32097, Taiwan (R.O.C.)

Tel: 03-284-1808

Fax: 03-284-1404

Mail:dc@dongchen.com.tw

Web:www.dongchen.com.tw