

ESD0603UC5VB

ESD0603UC5VB Ultra low capacitance ESD Protection Diode

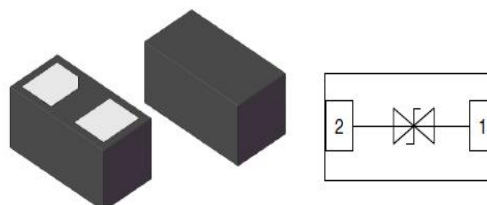
General description

Ultra low capacitance ESD Protection Diode in a DFN0603 Package.

Package Outline

FEATURES

- Ultra low Capacitance Typ 0.25 pF
- 100Watts peak pulse power($t_p=8/20\mu s$)
- Tiny DFN0603 package
- Bidirectional configurations
- R2R + Zener Technology
- Low Clamping voltage
- Low leakage current



Device Marking:

DFN0603 Package

Device Type	Marking
ESD0603UC5VB	5BU

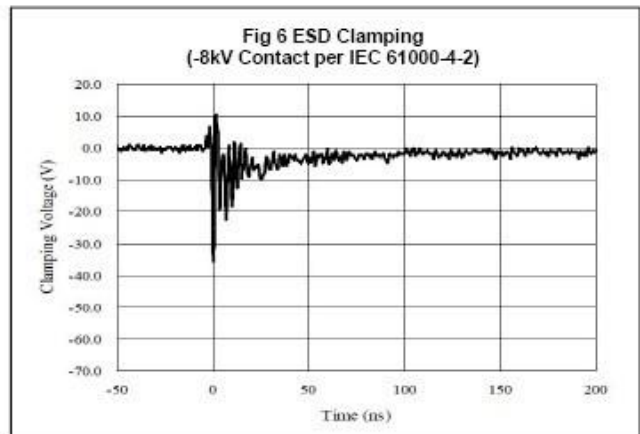
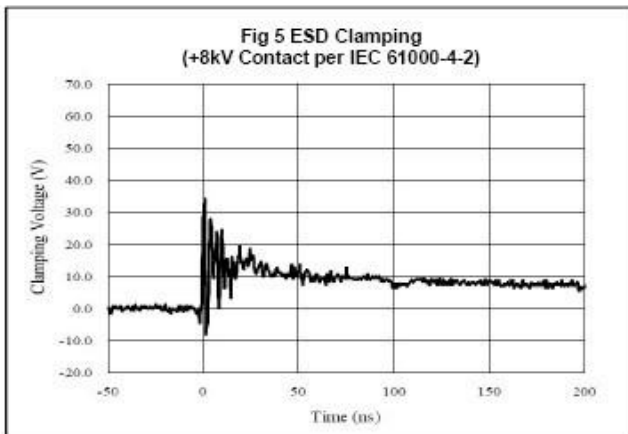
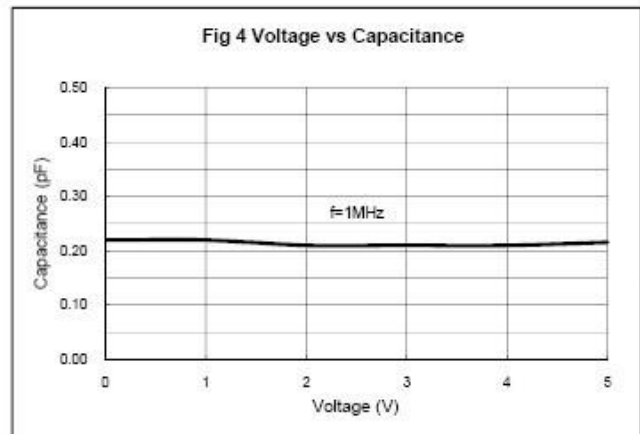
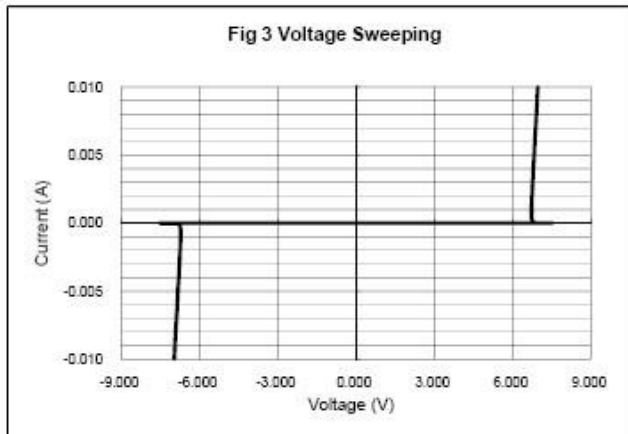
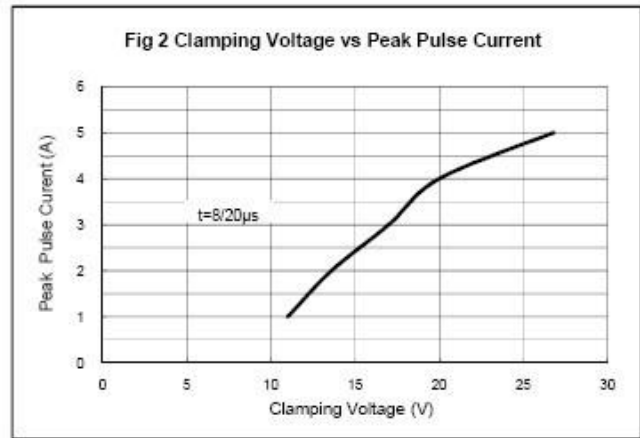
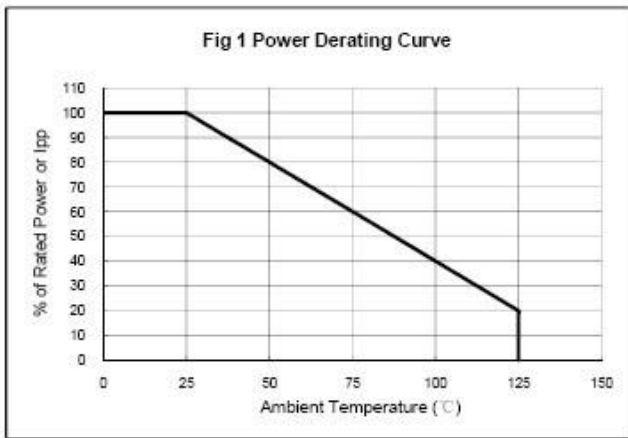
Absolute Maximum Ratings ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	± 20 ± 20	kV
P_{PP}	Peak Pulse Power (8/20 μs)	100	W
T_{OPT}	Operating Temperature	-55~125	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55~150	$^\circ\text{C}$

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				5.0	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1\text{mA}$	6.0			V
I_R	Reverse Leakage Current	$V_{RWM} = 5\text{V}$			100	nA
V_C	Clamping Voltage	$I_{PP} = 1\text{A}, t_p = 8/20\mu s$			13	V
		$I_{PP} = 4\text{A}, t_p = 8/20\mu s$			25	V
C_J	Junction Capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$		0.25		pF

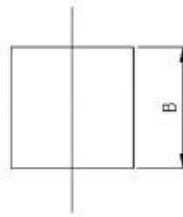
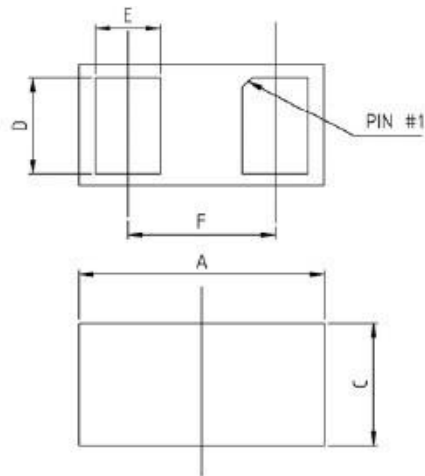
Typical Characteristic:





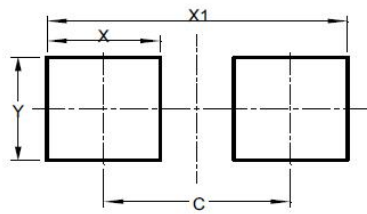
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DFN1006 Package Outline



Dimensions In Millimeterer			
Symbol	MIN	TYP	MAX
A	0.58	0.60	0.65
B	0.28	0.30	0.35
C	0.28	0.30	0.34
D	0.20	0.24	0.26
E	0.13	0.16	0.19
F	-	0.36	-

Pad Dimensions



Dimensions	Value (mm)
C	0.380
X	0.230
X1	0.610
Y	0.300

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