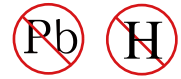




Ultra Low Capacitance ESD Protection Diode



Features

- Transient protection for high-speed data lines
- IEC 61000-4-2 (ESD) ±15kV (Air)
±8kV (Contact)
- IEC 61000-4-4 (EFT) 40A (5/50 ns)
- Cable Discharge Event (CDE)
- Package optimized for high-speed lines
- Ultra-small package (0.6mm×0.3mm×0.3mm)
- Protects one data, control or power line
- Low capacitance: 0.25pF (Typical)
- Low leakage current
- Low clamping voltage

Main applications

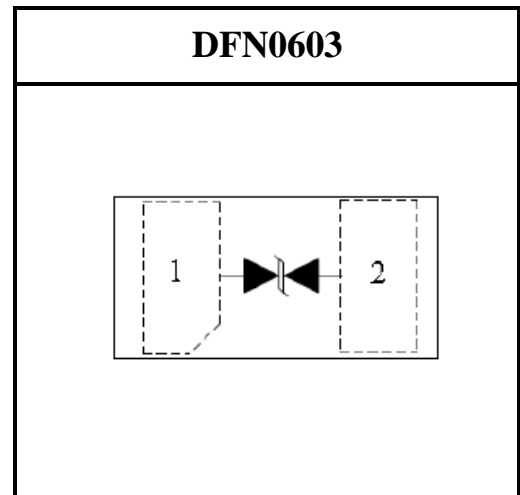
- Serial ATA
- Desktops, Servers and Notebooks
- Cellular Phones
- MDDI Ports
- USB Data Line Protection
- Display Ports
- Digital Visual Interfaces (DVI)

Mechanical Data

- DFN0603 package
- Flammability Rating: UL 94V-0
- Packaging: Tape and Reel
- High temperature soldering guaranteed: 260°C /10s
- Reel size: 7 inch

Ordering Information

- Device: YSESD05D6BU
- Package: DFN0603
- Marking: 5BU
- Material: Halogen free
- Packing: Tape & Reel
- Quantity per reel: 10,000pcs



DEVICE CHARACTERISTICS

YSESD05D6BU

ABSOLUTE MAXIMUM RATING

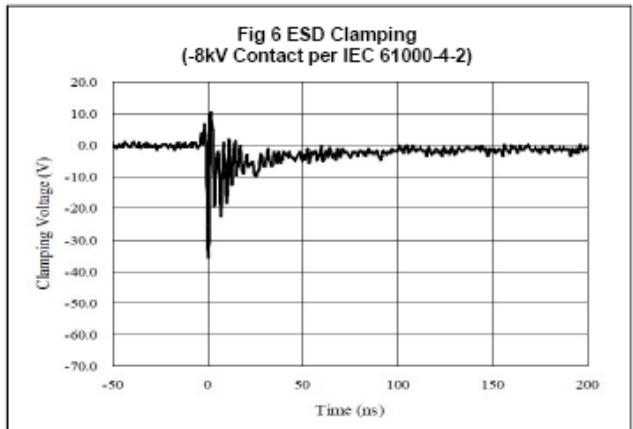
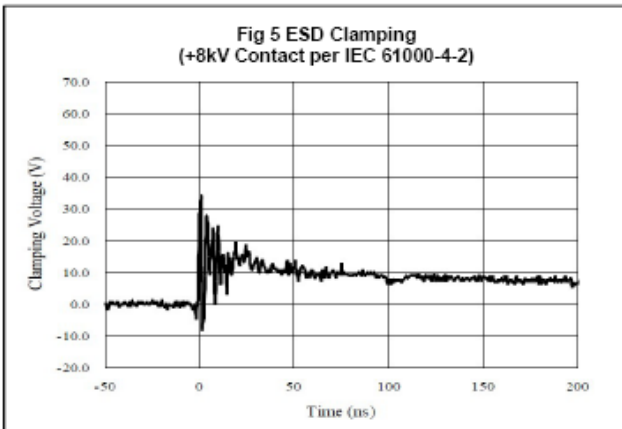
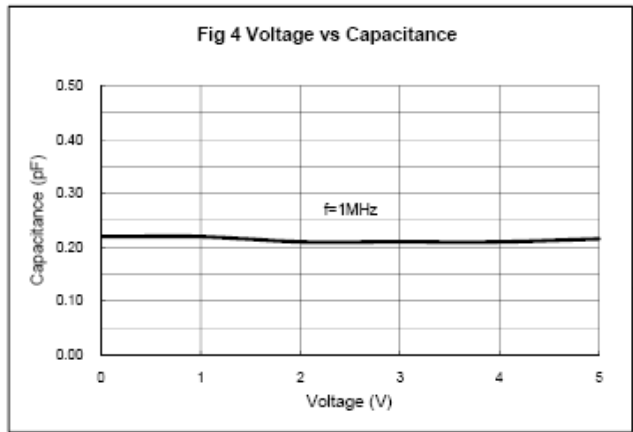
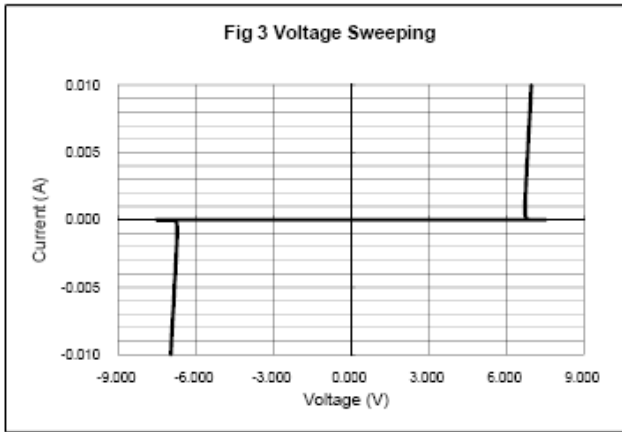
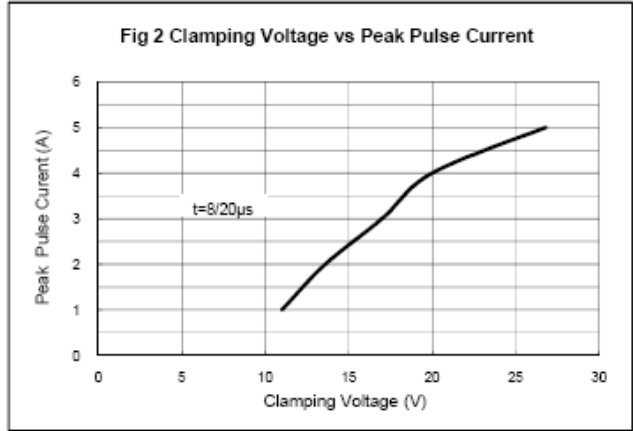
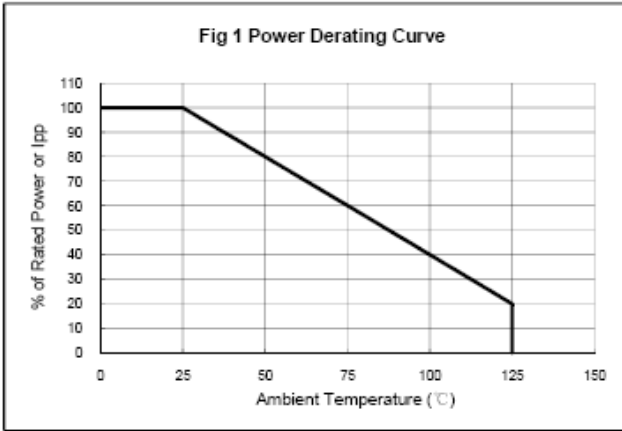
Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	± 20 ± 20	kV
P_{PP}	Peak Pulse Power (8/20 μ s)	100	W
T_{OPT}	Operating Temperature	-55~125	°C
T_{STG}	Storage Temperature	-55~150	°C

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$)

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

DEVICE CHARACTERISTICS

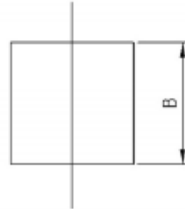
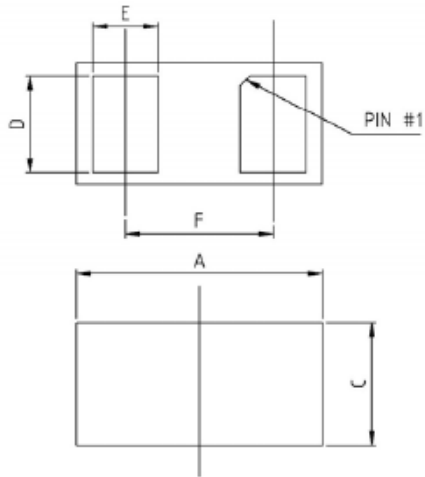
YSESD05D6BU



PACKAGE OUTLINE & DIMENSIONS

YSESD05D6BU

DFN0603 PACKAGE OUTLINE DIMENSIONS



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	-