

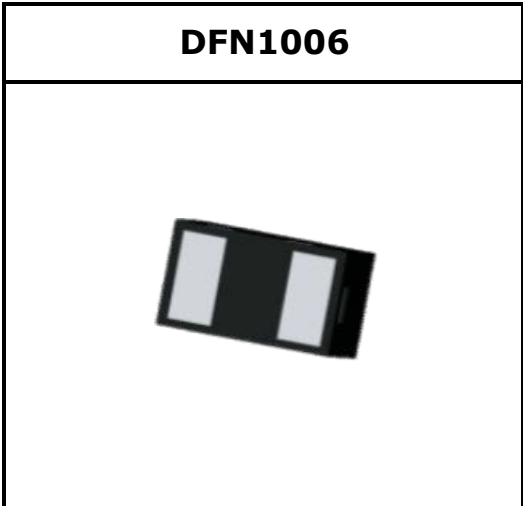


**Ultra Low Capacitance
Bidirectional TVS for ESD Protection Diode**



FEATURES

- ✧ Transient protection for high-speed data lines
 - IEC 61000-4-2 (ESD) ±15kV (Contact)
 - ±20kV (Air)
 - Cable Discharge Event (CDE)
- ✧ Package optimized for high-speed lines
- ✧ Ultra-small package (1.0mm×0.6mm×0.5mm)
- ✧ Protects one data, control line
- ✧ Low capacitance: 0.25pF (Typical)
- ✧ Low leakage current
- ✧ Low clamping voltage

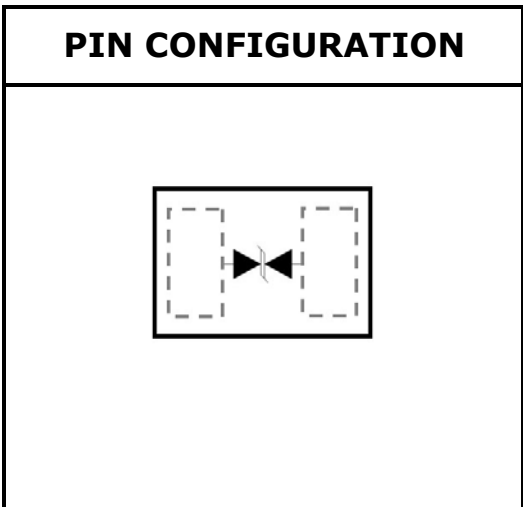


APPLICATIONS

- ✧ Local Area Network (LAN) equipment
- ✧ FireWire
- ✧ Computers and peripherals
- ✧ Communication systems
- ✧ High-speed data lines

MECHANICAL CHARACTERISTICS

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



ORDER INFORMATION

- ✧ Device: YSESD0801S-12CP
- ✧ Package: DFN1006
- ✧ Marking: 12BU
- ✧ Material: Halogen free
- ✧ Packing: Tape & Reel
- ✧ Quantity per reel: 10,000pcs

DEVICE CHARACTERISTICS

YSESD0801S-12CP

ABSOLUTE MAXIMUM RATING

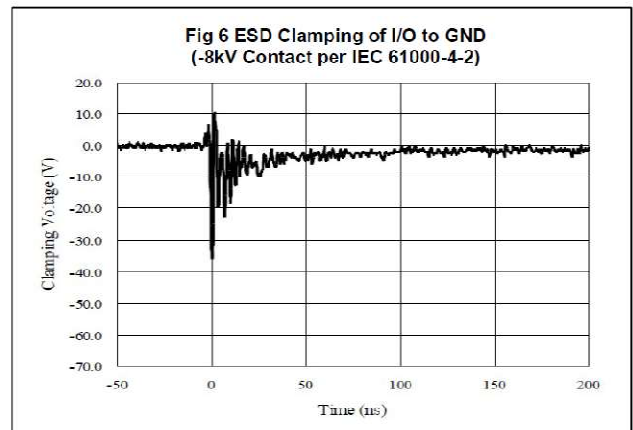
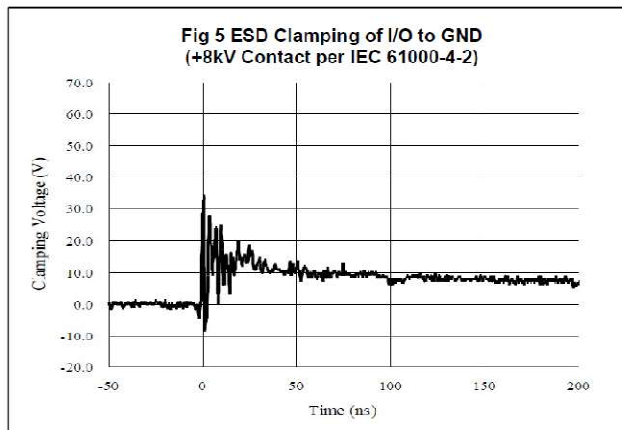
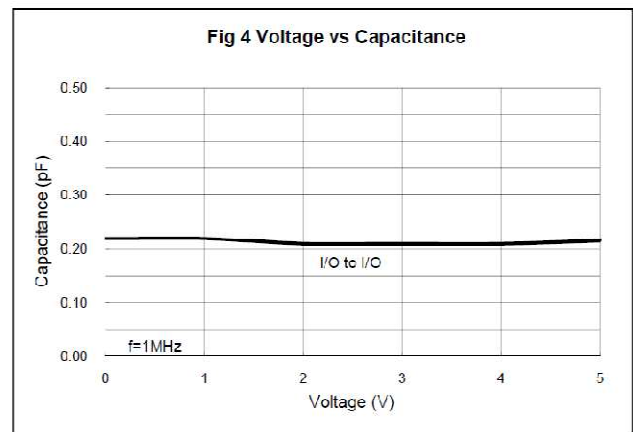
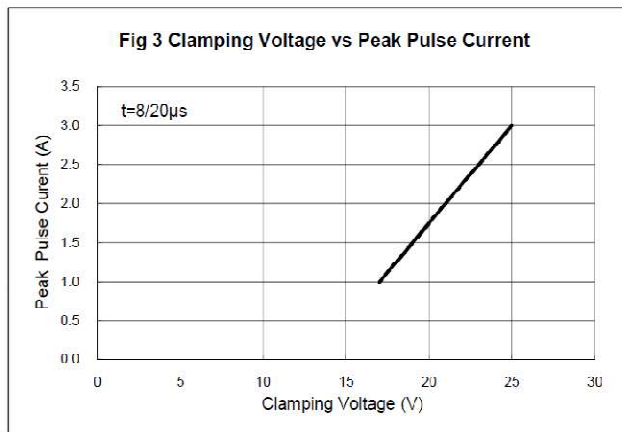
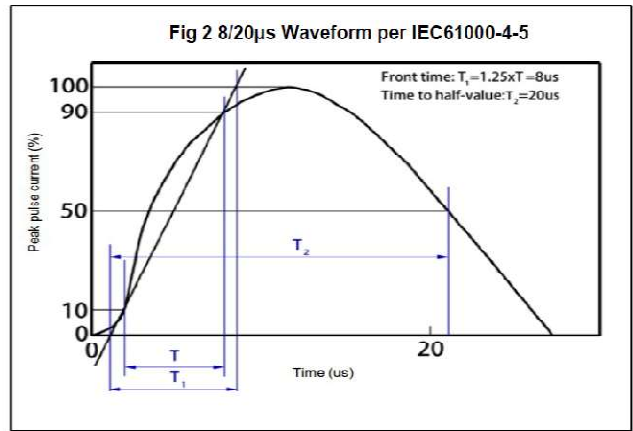
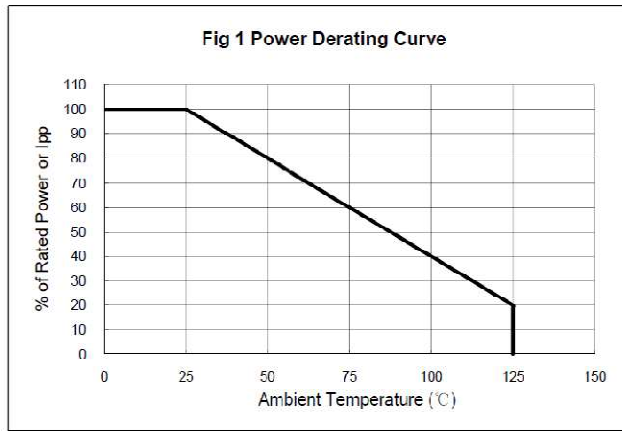
Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Contact) ESD per IEC 61000-4-2 (Air)	± 15 ± 20	kV
P_{PP}	Peak Pulse Power (8/20 μ s)	64	W
T_{OPT}	Operating Temperature	-55~125	$^{\circ}$ C
T_{STG}	Storage Temperature	-55~150	$^{\circ}$ C

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

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				12	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1mA$	13.3			V
I_R	Reverse Leakage Current	$V_{RWM} = 12V$			500	nA
V_C	Clamping Voltage	$I_{PP} = 1A, t_p = 8/20\mu s$			22	V
		$I_{PP} = 2A, t_p = 8/20\mu s$			32	V
C_J	Junction Capacitance	$V_R = 0V, f = 1MHz$		0.25	0.40	pF

DEVICE CHARACTERISTICS

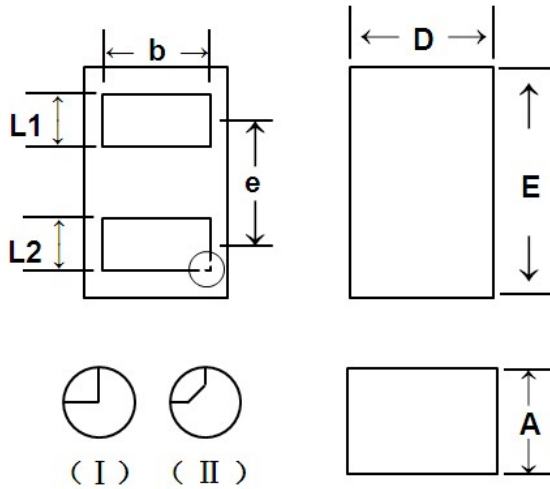
YSESD0801S-12CP



PACKAGE OUTLINE & DIMENSIONS

YSESD0801S-12CP

DFN1006 PACKAGE OUTLINE DIMENSIONS



NOTE: ALL DIMENSIONS IN MM

	MIN	NOM	MAX
D	0.55	0.60	0.65
E	0.95	1.00	1.05
L1	0.20	0.25	0.30
L2	0.20	0.25	0.30
A	0.45	0.50	0.55
b	0.45	0.50	0.55
e		0.64BSC	

