

DESCRIPTION

The SYESD5Z3.3C is designed to protect voltage sensitive components from ESD and transient voltage events. Excellent clamping capability, low leakage, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium.

This device has been specifically designed to protect sensitive components which are connected to data and transmission lines from overvoltage caused by ESD (electrostatic discharge), CDE (Cable Discharge Events), and EFT (electrical fast transients).

FEATURES

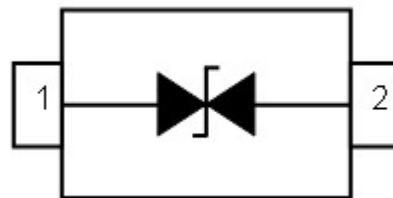
- ◇ IEC61000-4-2 (ESD) $\pm 30\text{kV}$ (Air),
 $\pm 30\text{kV}$ (Contact)
- ◇ IEC61000-4-4 (EFT) 40A (5/50ns)
- ◇ Peak power dissipation: 60W (8/20 μs)
- ◇ Protects one I/O line
- ◇ Low clamping voltage
- ◇ Working voltages : 3.3V
- ◇ Low leakage current

APPLICATIONS

- ◇ Cell Phone Handsets and Accessories
- ◇ Microprocessor based equipment
- ◇ Personal Digital Assistants (PDA's)
- ◇ Notebooks, Desktops, and Servers
- ◇ Portable Instrumentation
- ◇ Networking and Telecom
- ◇ Serial and Parallel Ports
- ◇ Peripherals

◇ Marking: **3C** ∞

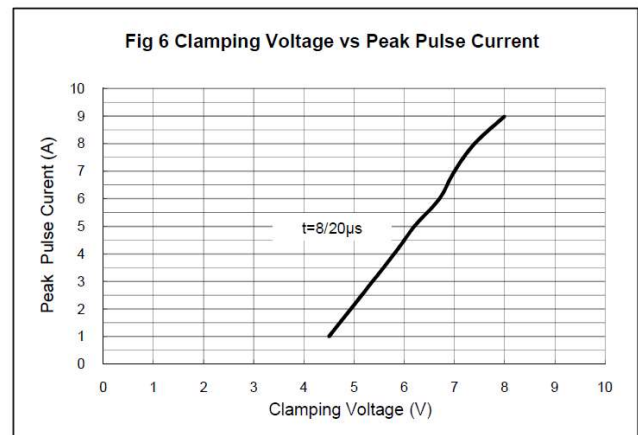
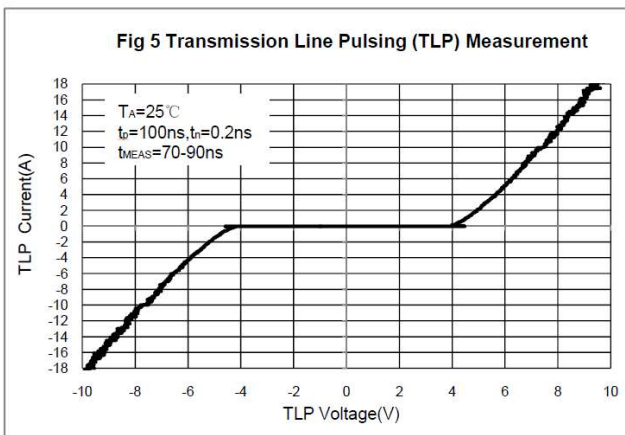
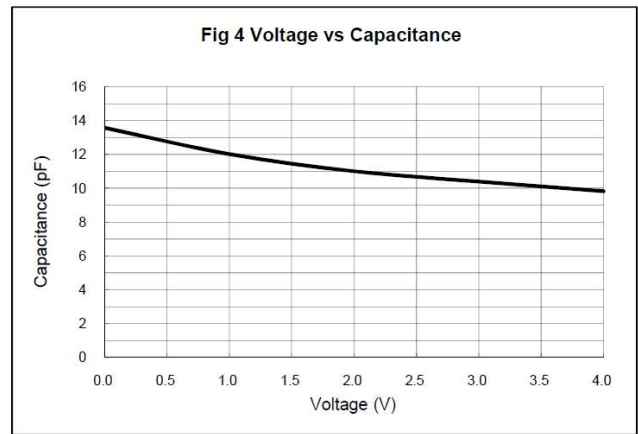
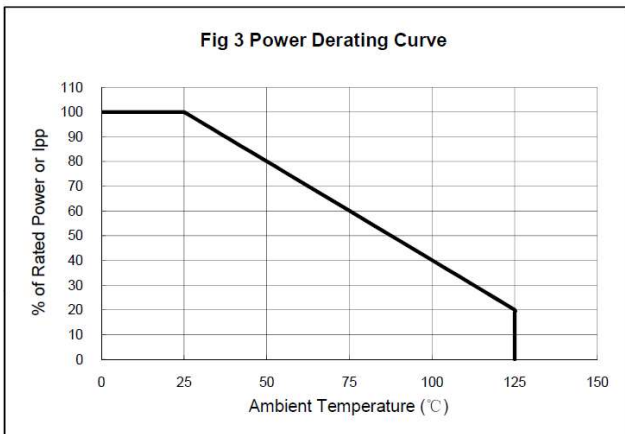
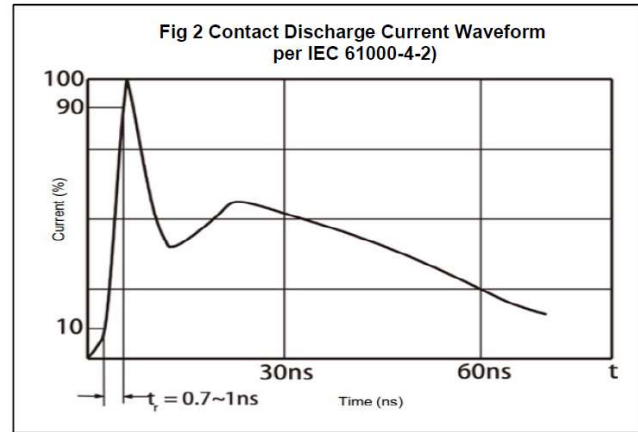
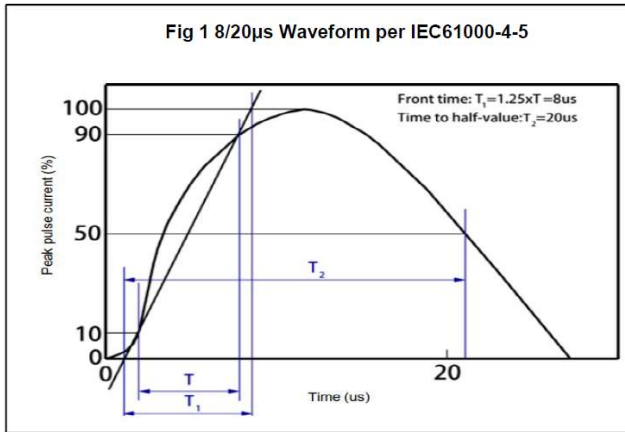
SOD-523



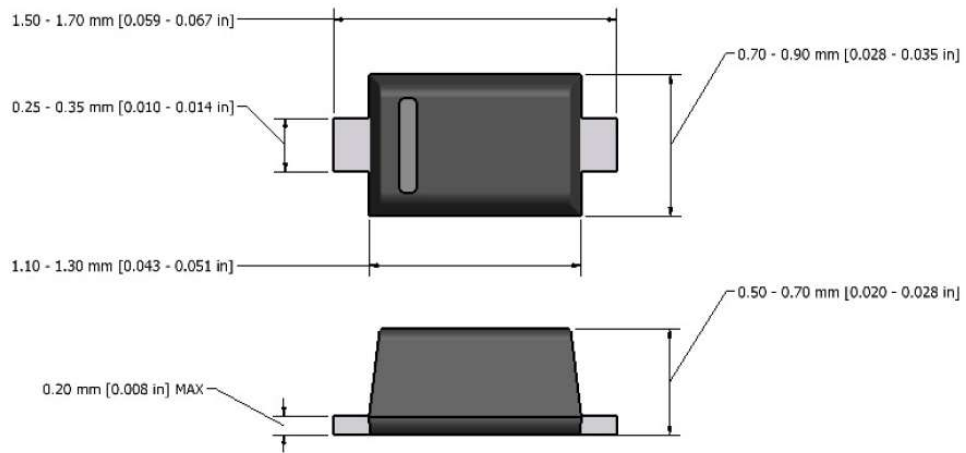


ABSOLUTE MAXIMUM RATING			
Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Contact)	± 30	kV
	ESD per IEC 61000-4-2 (Air)	± 30	
P_{PP}	Peak Pulse Power (8/20 μ s)	60	W
T_{OPT}	Operating Temperature	-40~150	$^{\circ}$ C
T_{STG}	Storage Temperature	-40~150	$^{\circ}$ C

ELECTRICAL CHARACTERISTICS (Tamb=25$^{\circ}$C)						
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				3.3	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1mA$	3.6			V
I_R	Reverse Leakage Current	$V_{RWM} = 3.3V$			1.0	μ A
V_C	Clamping Voltage	$I_{PP} = 1A, t_p = 8/20\mu s$			6.5	V
V_C	Clamping Voltage	$I_{PPmax} = 5A, t_p = 8/20\mu s$			12.0	V
$V_{CTL P}$	TLP Clamping Voltage	$I_{PP} = 16A$ IEC61000-4-2 Level 4 equivalent ($\pm 8kV$ Contact, $\pm 15kV$ Air)		9		V
C_J	Junction Capacitance	$V_R = 0V, f = 1MHz$			16.5	pF

ELECTRICAL CHARACTERISTICS CURVE


SOD-523 PACKAGE OUTLINE DIMENSIONS



Note: Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.