

EVVOSEMI[®]

THINK CHANGE DO



ESD



TVS



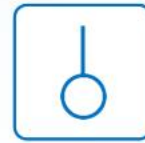
MOS



LDO



Diode



Sensor



DC-DC

Product Specification

▶ Domestic	Part Number	SDxxC
▶ Overseas	Part Number	SDxxC
▶ Equivalent	Part Number	SDxxC

EV is the abbreviation of name EVVO

Bidirectional TVS Diodes

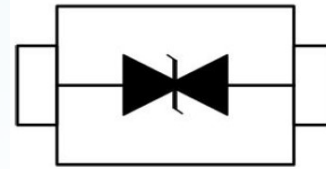
DESCRIPTION

The SDxxC Series is designed for applications requiring transient overvoltage protection capability. They are intended for use in voltage and ESD sensitive equipment such as computers, printers, business machines, communication systems, medical equipment and other applications. These devices are ideal for situations where board space is at a premium.

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

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



FEATURES

- IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- 350 Watts Peak Pulse Power per (tp=8/20 μ s)
- Protects one I/O line (bidirectional)
- Low clamping voltage
- Working voltages :
3V,5V,8V,12V,15V,18V,20V,24V,36V
- Low leakage current

MACHANICAL DATA

- SOD-323 package
- Flammability Rating: UL 94V-0
- Packaging: Tape and Reel
- High temperature soldering guaranteed: 260°C/10s
- Reel size: 7 inch
- MSL 1

Bidirectional TVS Diodes

ABSOLUTE MAXIMUM RATING

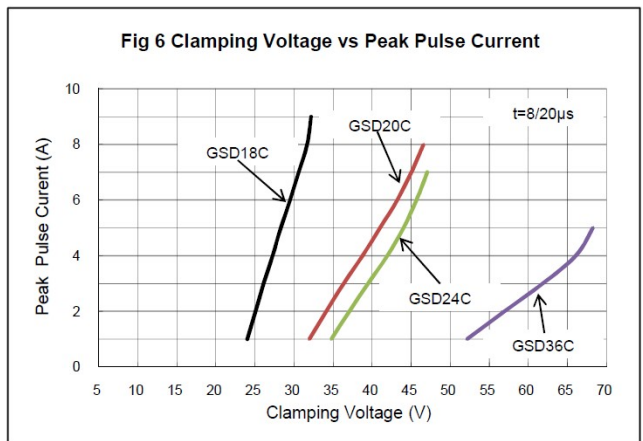
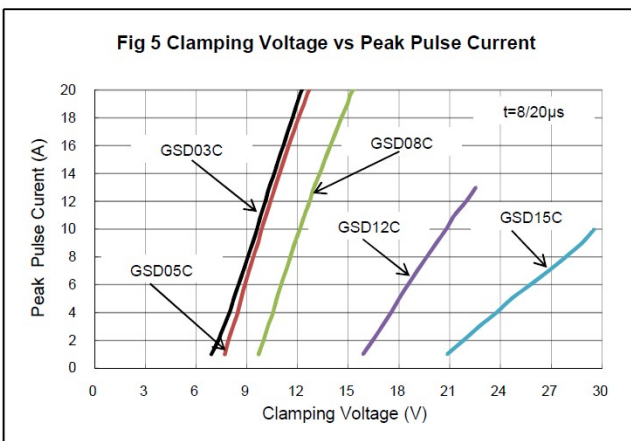
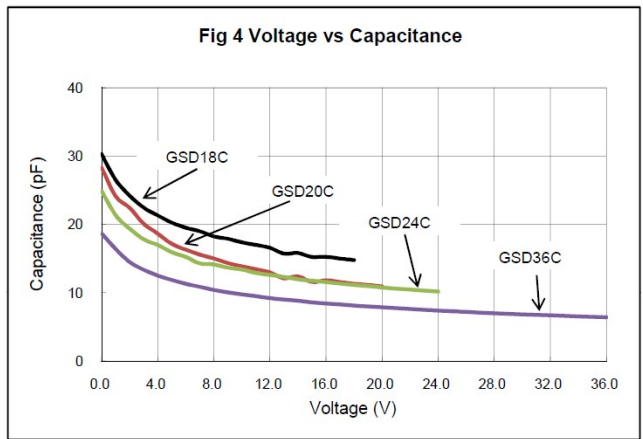
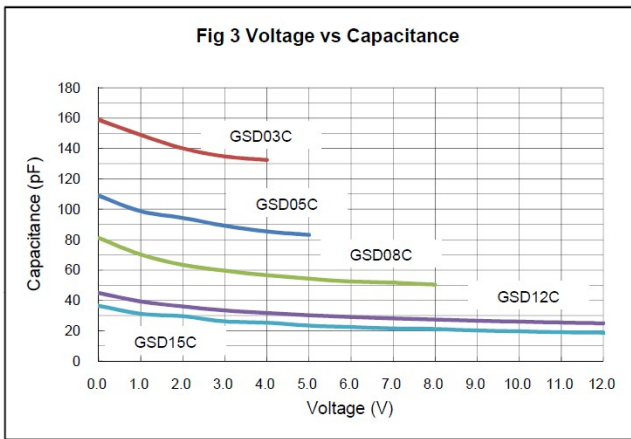
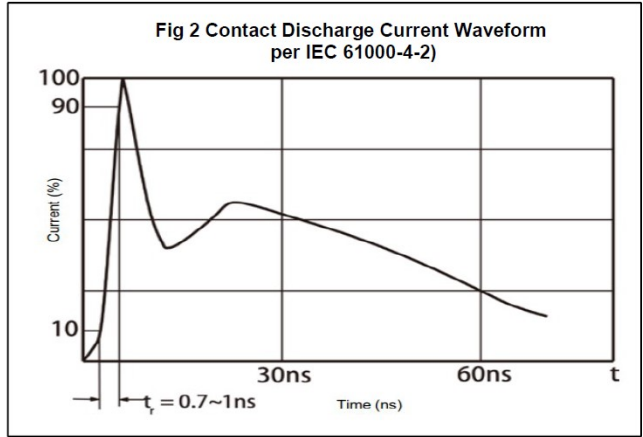
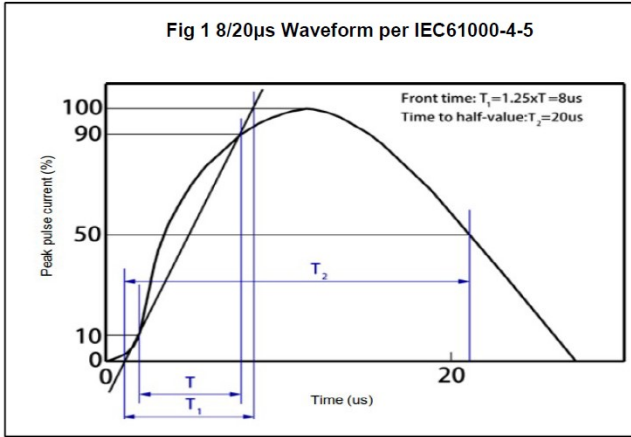
Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air)	±30	kV
	ESD per IEC 61000-4-2 (Contact)	±30	
P_{PP}	Peak Pulse Power (8/20 μ s)	350	W
T_{OPT}	Operating Temperature	-55/+150	°C
T_{STG}	Storage Temperature	-55/+150	°C
T_L	Lead Soldering Temperature	260 (10 sec.)	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25)

PART NUMBER	DEVICE MARKING	V_{RWM} (V) (max.)	V_B (V) (min.)	I_T (mA)	$V_C@1A$ (V) (max.)	V_C (V) (max.) (@A)	I_R (μ A) (max.)	C_T (pF) (max.)	
SD03C	2A	3.3	4.0	1	7.5	16.0	20	40	450
SD05C	2B	5.0	6.0	1	9.8	18.0	17	10	200
SD08C	2C	8.0	8.5	1	13.4	24.0	15	2	120
SD12C	2D	12.0	13.3	1	19.0	32.0	11	1	75
SD15C	2J	15.0	16.7	1	24.0	38.0	10	1	68
SD18C	2K	18.0	20.0	1	29.0	45.0	9	1	57
SD20C	2L	20.0	22.3	1	35.0	50.0	8	1	52
SD24C	2H	24.0	26.7	1	43.0	52.0	7	1	50
SD36C	2N	36.0	40.0	1	60.0	75.0	4.5	1	35

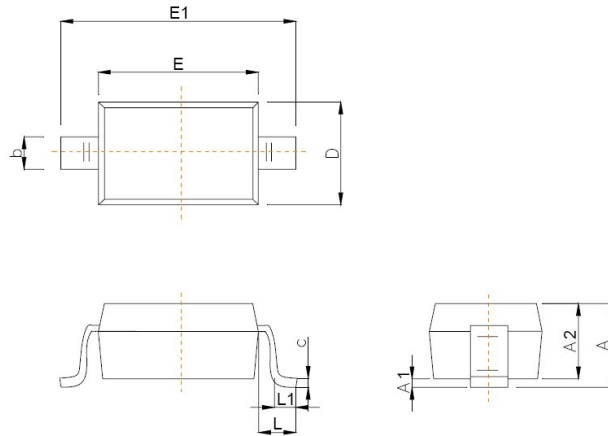
Bidirectional TVS Diodes

ELECTRICAL CHARACTERISTICS CURVE

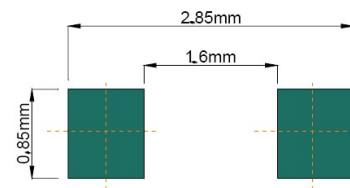


Bidirectional TVS Diodes

SOD-323 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters	
	Min	Max
A		1.00
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
e	1.800	2.040
L	0.475 REF	
L1	0.250	0.400
θ	0°	8°



Recommended Pad outline

Ordering information

Order code	Package	Base qty	Delivery mode
SDxxC	SOD-323	3000	Tape and reel

Disclaimer

EVOSEMI ("EVVO") reserves the right to make corrections, enhancements, improvements, and other changes to its products and services at any time, and to discontinue any product or service without notice.

EVVO warrants the performance of its hardware products to the specifications applicable at the time of sale in accordance with its standard warranty. Testing and other quality control techniques are used as deemed necessary by EVVO to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

Customers should obtain and confirm the latest product information and specifications before final design, purchase, or use. EVVO makes no warranty, representation, or guarantee regarding the suitability of its products for any particular purpose, nor does EVVO assume any liability for application assistance or customer product design. EVVO does not warrant or accept any liability for products that are purchased or used for any unintended or unauthorized application.

EVVO products are not authorized for use as critical components in life support devices or systems without the express written approval of EVOSEMI.

The EVVO logo and EVOSEMI are trademarks of EVOSEMI or its subsidiaries in relevant jurisdictions. EVVO reserves the right to make changes without further notice to any products herein.