

DESCRIPTION

The SGSD15C is transient voltage suppressor arrays designed for ESD protection of smart phones, laptop computers and other portable electronics. These silicon based diodes offer superior clamping voltage and performance compared to other technologies such as MLVs.

The SGSD15C can be utilized as a single line protector in a bidirectional configuration. The SOD-323 small package configuration offers designers the flexibility of placement on the printed circuit board for each I/O port or voltage bus. The SGSD15C meets the IEC 61000-4-2 (ESD), 61000-4-4 (EFT) and 61000-4-5 requirements.

FEATURES

- > 350 Watts Peak Pulse Power per Line ($t_p=8/20\mu s$)
- > Protects one I/O or power line
- > Low clamping voltage
- > Working voltages: 15.0V
- > RoHS Compliant

APPLICATIONS

- > Cell Phone Handsets and Accessories
- > Microprocessor based equipment
- > Personal Digital Assistants (PDA's)
- > Notebooks, Desktops, and Servers
- > Portable Instrumentation
- > Peripherals
- > Pagers

IEC COMPATIBILITY

- > IEC61000-4-2 (ESD) $\pm 20kV$ (air), $\pm 15kV$ (contact)
- > IEC61000-4-4 (EFT) 40A (5/50ns)

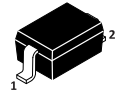
MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power ($t_p=8/20\mu s$ waveform).	PPM	350	Watts
Operating Temperature Range.	T_J	-55~+125	°C
Storage Temperature Range.	T_{STG}	-55~+150	°C
Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.			

ELECTRICAL CHARACTERISTICS

Part Number	Device Marking Code	Reverse Stand-off Voltage Max.	Breakdown Voltage Min.	Test Current	$V_C(V)$ Max.@1A	$V_C(V)$	Junction Capacitance Max.	Reverse Leakage Max.
		$V_{RWM}(V)$	$V_{BR}(V)$	$I_T(mA)$	$V_C(V)$	Max. @A	$C_T(PF)$	$I_R(\mu A)$
SGSD15C	2J	15.0	16.7	1	24	29 12	75/100	7.5

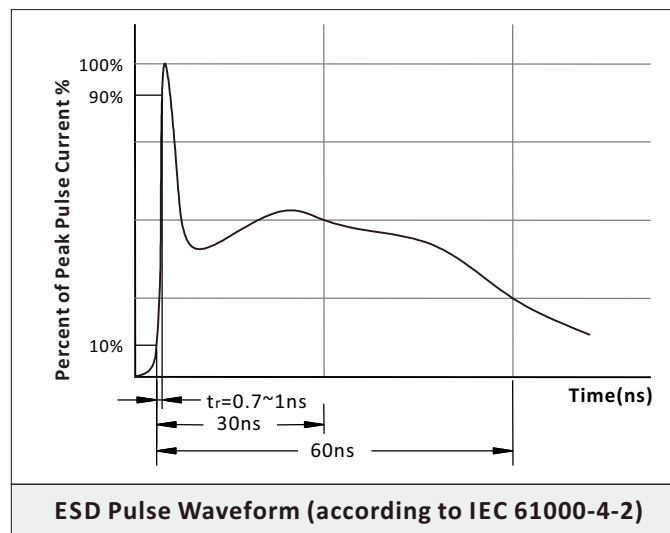
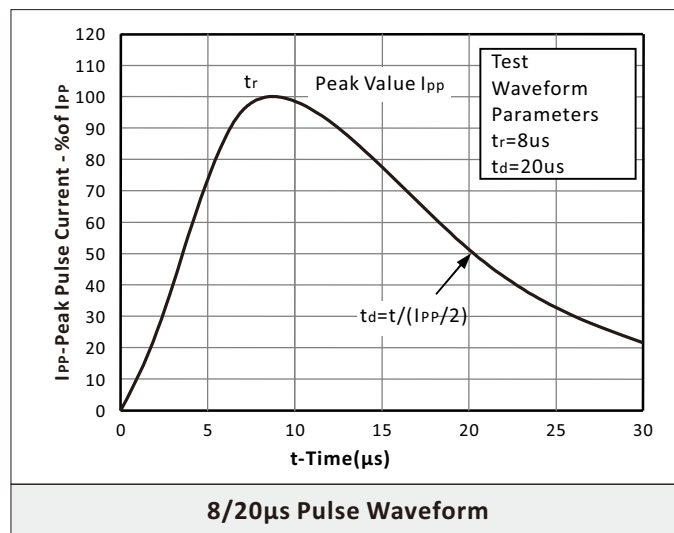


SOD-323 PACKAGE



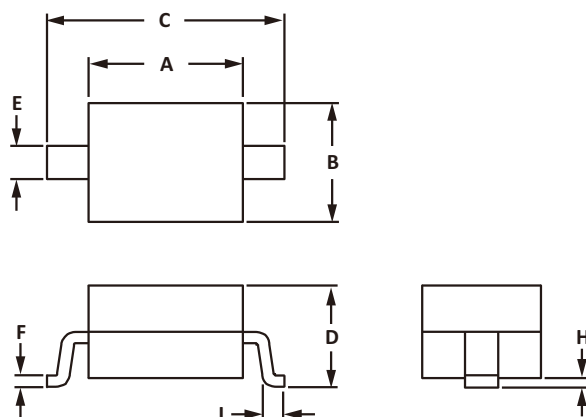
PIN CONFIGURATIONS

CHARACTERISTIC CURVES



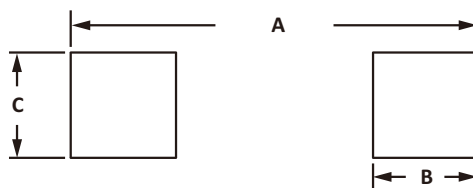
SOD-323 PACKAGE INFORMATION

OUTLINEDIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.90	0.063	0.075
B	1.15	1.45	0.045	0.057
C	2.30	2.70	0.090	0.106
D	0.80	1.10	0.031	0.043
E	0.25	0.40	0.010	0.016
F	0.089	0.20	0.003	0.008
H	-	0.10	-	0.004
L	0.20	-	0.008	-



RECOMMENDED PAD LAYOUT DIMENSIONS

PAD LAYOUT DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.87	3.12	0.113	0.123
B	0.66	0.91	0.026	0.036
C	0.66	0.91	0.026	0.036

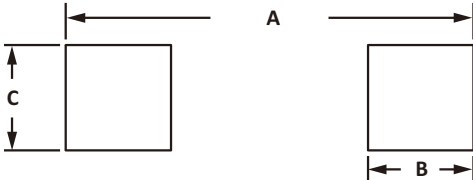


ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SGSD15C	SOD-323	3000PCS	7"

RECOMMENDED PAD LAYOUT DIMENSIONS

PAD LAYOUT DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.87	3.12	0.113	0.123
B	0.66	0.91	0.026	0.036
C	0.66	0.91	0.026	0.036



ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SGSD15C	SOD-323	3000PCS	7"