

Features

- * Ultra low leakage: nA level
- * Low clamping voltage
- * RoHS Compliant
- * REACH & SVHC Compliant
- * Halogen Compliant
- * SOD-923 Package

Circuit Diagram



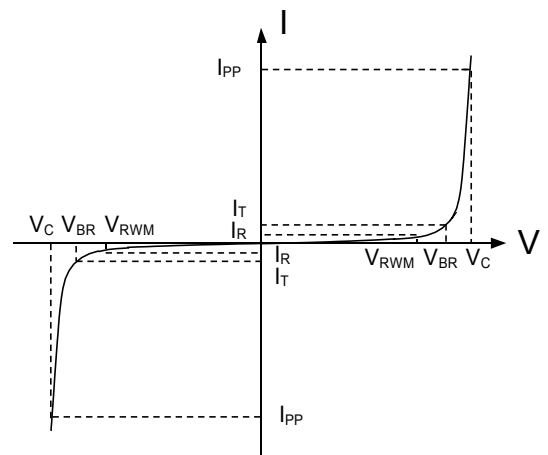
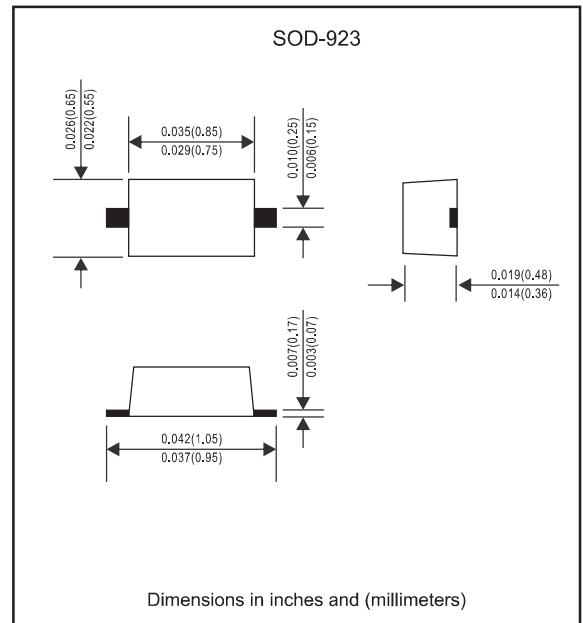
Ordering Information

Part Number	Packaging	Reel Size
ESD9B5.0ST5G-FS	8000/Tape & Reel	7 inch

Marking Diagram : C

Portion Electronics Parameter

Symbol	Parameter
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}



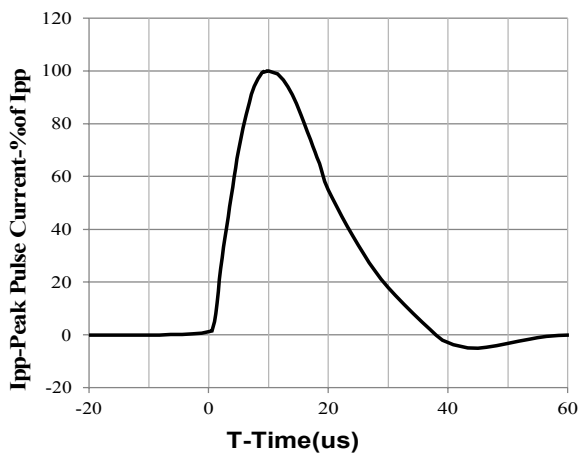
Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs pulse)	P_{pk}	96	W
Peak Pulse Current (8/20 μs pulse)	I_{PP}	8	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	± 30	kV
ESD per IEC 61000-4-2 (Contact)		± 30	
Operating Temperature Range	T_J	-40 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$

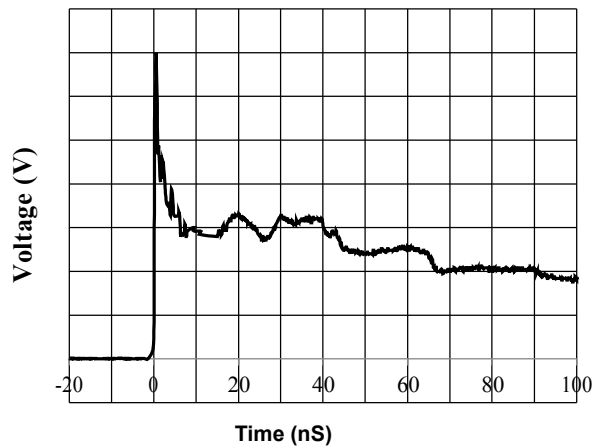
Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V _{RWM}				5	V
Breakdown Voltage	V _{BR}	I _T = 1mA	5.5		8.5	V
Reverse Leakage Current	I _R	V _{RWM} = 5V			100	nA
Clamping Voltage	V _C	I _{PP} = 1A (8 / 20μs pulse)			9	V
Clamping Voltage	V _C	I _{PP} = 8A (8 / 20μs pulse)			12	V
Junction Capacitance	C _J	V _R = 0V, f = 1MHz,		15		pF

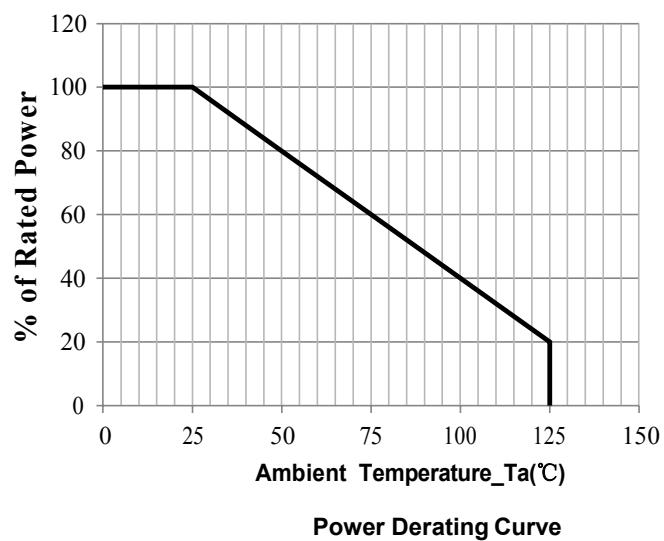
Typical Performance Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise Specified)



8 / 20us Pulse Waveform



IEC61000-4-2 Pulse Waveform



Power Derating Curve