



■ Features

- Uni-directional ESD protection of two lines
- 50Watts peak pulse power (tp = 8/20μs)
- Working voltage: 5V
- Low capacitance: 0.6pF(Max)
- Low leakage current
- Low reverse clamping voltage
- IEC 61000-4-2 ±15kV contact ±20kV air
- IEC 61000-4-5 (Lightning) 4A (8/20μs)

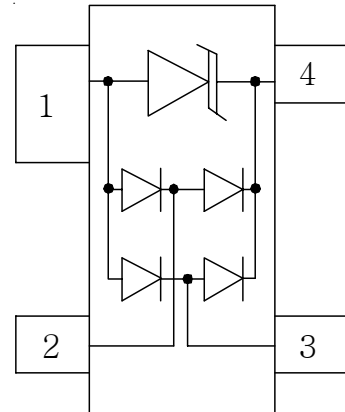
■ Applications

- Cellular Handsets and Accessories
- Notebooks and Handhelds
- Personal Digital Assistants
- Portable Instrumentation
- Digital Cameras
- Peripherals
- Audio Players, Keypads, Side Keys, LCD
- USB 2.0

■ Mechanical Data

- Package:SOT-143
- Molding compound flammability rating: UL 94V-0
- RoHS/WEEE Compliant

■ Schematic & PIN Configuration



■ Ordering Information

Part Number	Package	Marking	Packing	Reel Size
ESD05V14T	SOT-143		3000 Tape & Reel	7 inches

■ Absolute Maximum Rating($T_A=25^{\circ}\text{C}$ unless otherwise Specified)

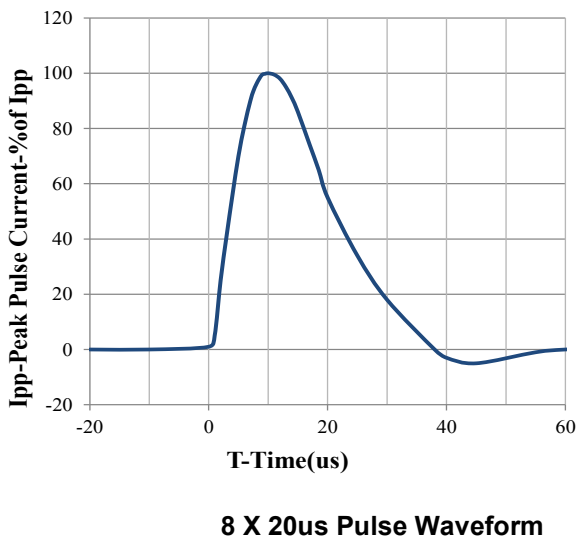
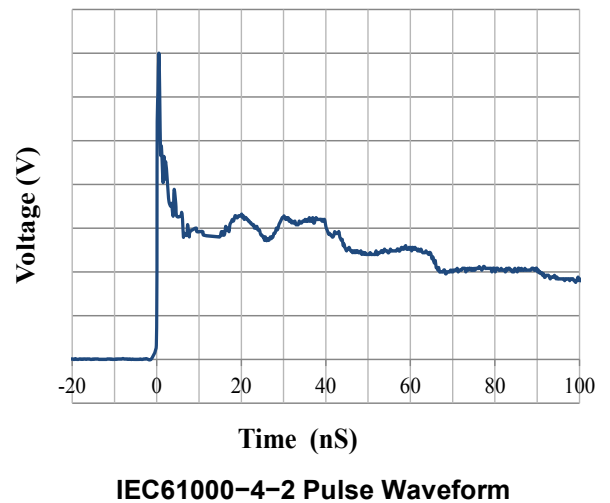
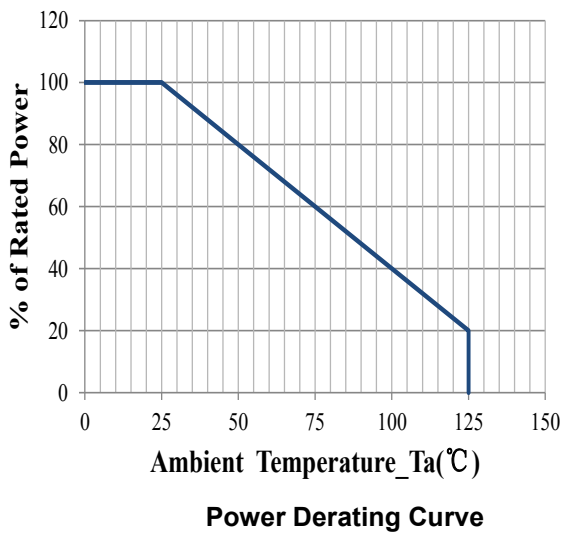
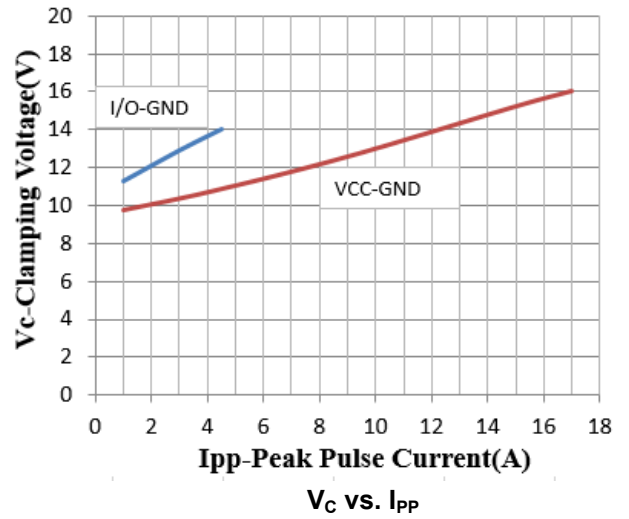
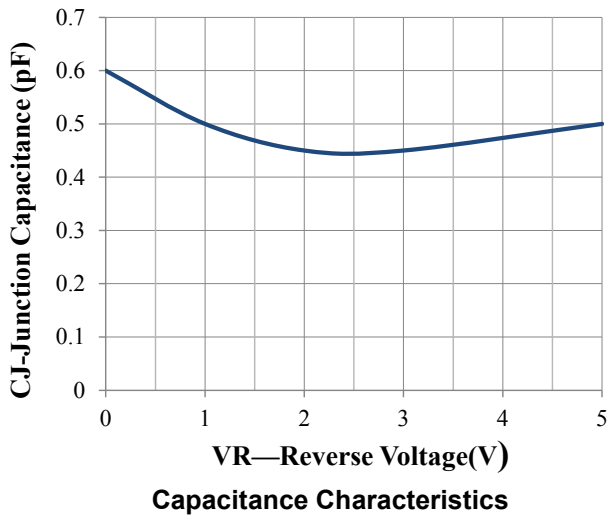
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs , I/O-GND)	Ppk	50	W
Peak Pulse Power (8/20 μs , Vcc-GND)	Ppk	240	W
Peak Pulse Current (8/20 μs , I/O-GND)	IPP	4	A
Peak Pulse Current (8/20 μs , Vcc-GND)	IPP	15	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	$V_{\text{ESD},VDD}$	± 20	kV
	$V_{\text{ESD},I/O}$	± 15	
Operating Temperature Range	TJ	150	$^{\circ}\text{C}$
Storage Temperature Range	Tstg	-55 to +150	$^{\circ}\text{C}$

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

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}	I/O-GND			5	V
Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$, I/O-GND	6	7.0	9	V
Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$, VCC-GND	6	7.2	9	
Reverse Leakage Current	I_R	$V_{\text{RWM}} = 5\text{V}$			1	μA
Clamping Voltage	V_C	IPP = 4A (8 x 20 μs pulse), I/O-GND		14.0	16.0	V
Clamping Voltage	V_C	IPP = 15A (8 x 20 μs pulse), VCC-GND		15.0	17.0	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$, I/O-I/O		0.3	0.5	pF
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$, I/O-GND		0.6	0.9	pF

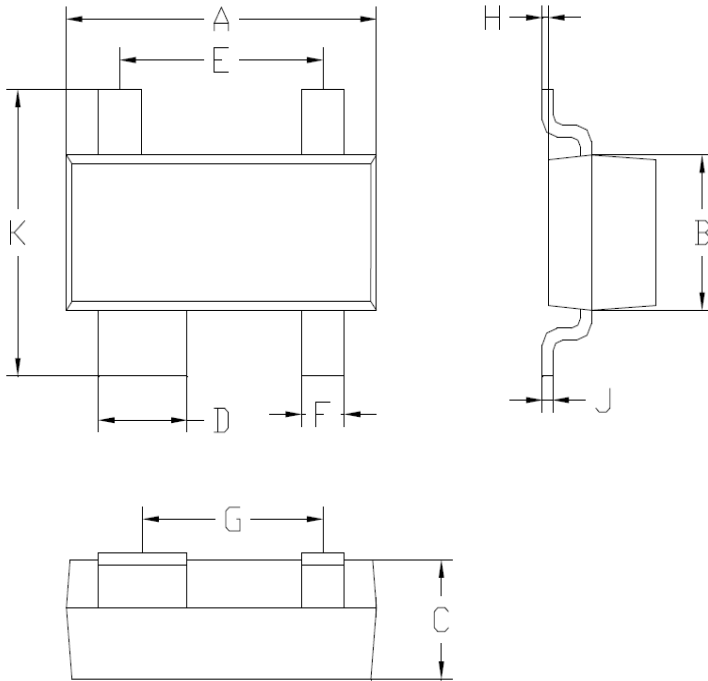


■ Typical Characteristics($T_A=25^{\circ}C$ unless otherwise Specified)





■ Outline Drawing – SOT-143



SOT-143		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	0.9	1.1
D	0.78	0.88
E	1.80	2.00
F	0.37	0.43
G	1.59	1.79
H	0.02	0.1
J	0.05	0.15
K	2.20	2.60
ALL Dimensions in mm		