

■ Features

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

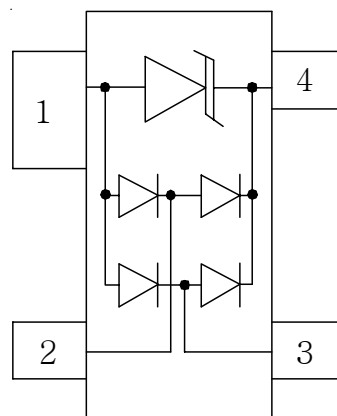
■ Applications

- 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
SR05	SOT-143		3000 Tape & Reel	7 inches

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

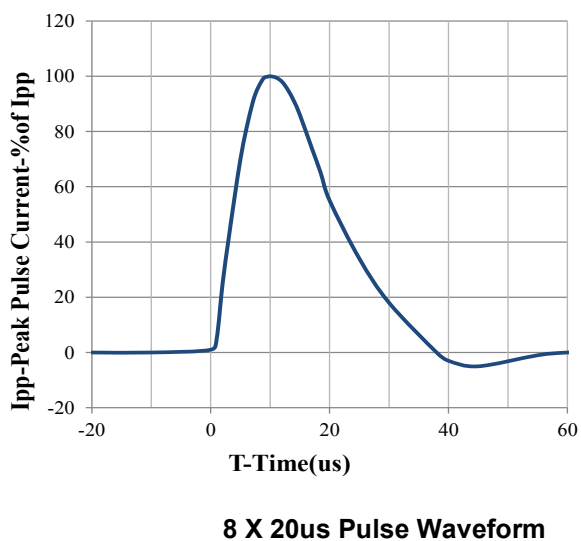
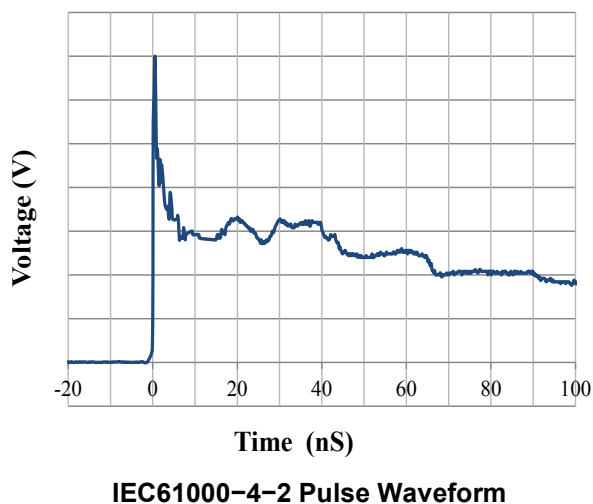
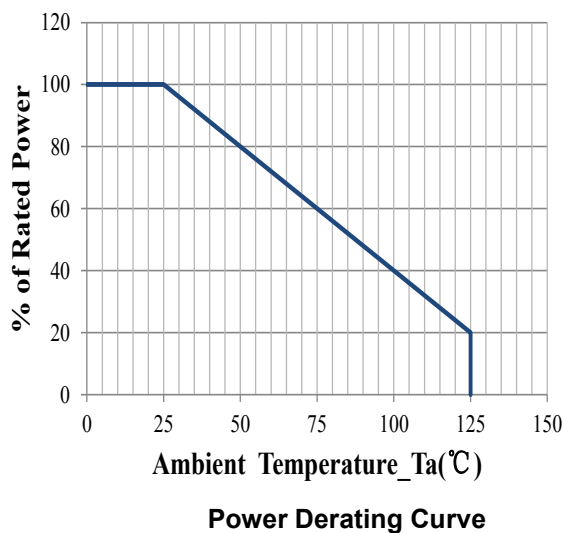
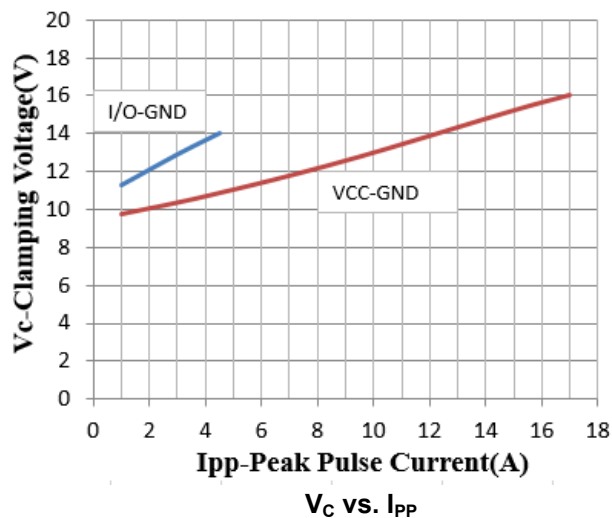
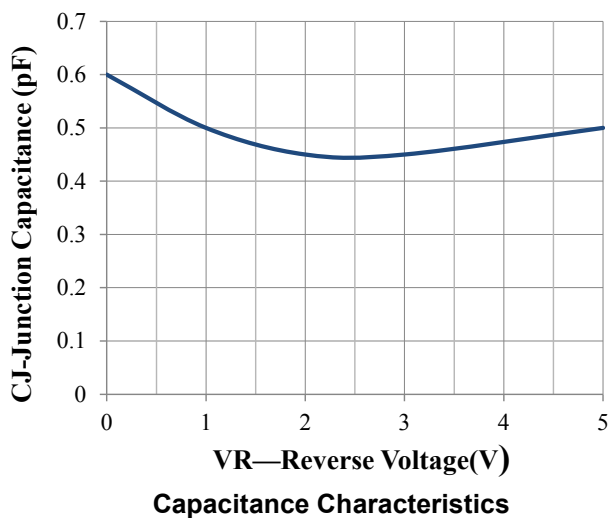
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs , I/O-GND)	P _{pk}	50	W
Peak Pulse Power (8/20 μs , V _{CC} -GND)	P _{pk}	240	W
Peak Pulse Current (8/20 μs , I/O-GND)	I _{PP}	4	A
Peak Pulse Current (8/20 μs , V _{CC} -GND)	I _{PP}	15	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V _{ESD,VDD} V _{ESD,I/O}	± 20 ± 15	kV
Operating Temperature Range	T _J	150	$^{\circ}\text{C}$
Storage Temperature Range	T _{stg}	-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 = 1mA, I/O-GND	6	7.0	9	V
Breakdown Voltage	V _{BR}	I _T = 1mA, V _{CC} -GND	6	7.2	9	
Reverse Leakage Current	I _R	V _{RWM} = 5V			1	μA
Clamping Voltage	V _C	I _{PP} = 4A (8 x 20 μs pulse), I/O-GND		14.0	16.0	V
Clamping Voltage	V _C	I _{PP} = 15A (8 x 20 μs pulse), V _{CC} -GND		15.0	17.0	V
Junction Capacitance	C _J	V _R = 0V, f = 1MHz, I/O-I/O		0.3	0.5	pF
Junction Capacitance	C _J	V _R = 0V, f = 1MHz, I/O-GND		0.6	0.9	pF

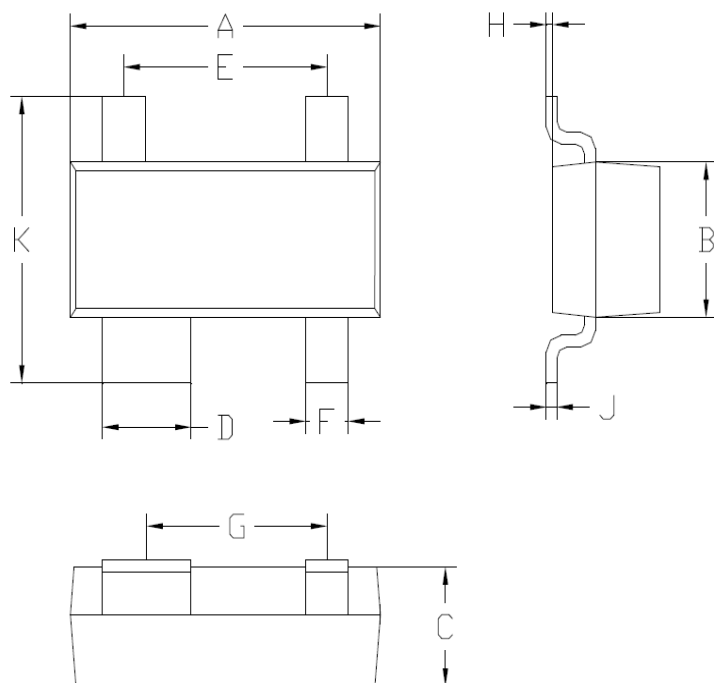


■ Typical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise Specified)





■ 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		