1.Features

- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test
  - Air discharge: ±30kV
  - Contact discharge: ±30kV
  - IEC61000-4-4 (EFT) 40A (5/50ns)
  - IEC61000-4-5 (Lightning) 6A (8/20μs)
- Ultra low leakage: nA level
- Operating voltage: 5V
- Low clamping voltage
- RoHS Compliant

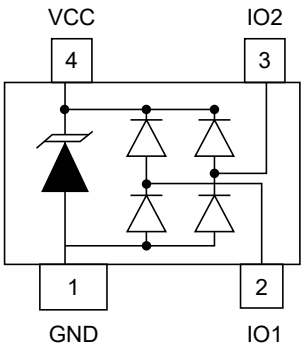
2.Applications

- USB 2.0 power and data line
- Set-top box and digital TV
- Digital video interface (DVI)
- Notebook Computers
- SIM Ports
- 10/100 Ethernet

3.Mechanical Characteristics

- Package: SOT-143
- Lead Finish: Matte Tin
- UL Flammability Classification Rating 94V-0

4.Pinning Information



SOT-143

5.Absolute Maximum Ratings

Parameter	Symbol	Value	Units
Peak Pulse Power (8/20μs)	P_{PK}	150	W
Peak Pulse Current (8/20μs)	I_{PP}	6	A
ESD per IEC 61000-4-2(Air)	V_{ESD}	±30	kV
ESD per IEC 61000-4-2(Contact)		±30	kV
Junction Temperature Range	T_J	-55 to 125	°C
Storage Temperature Range	T_{STG}	-55 to 150	°C

6.Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Working Voltage	V_{RWM}				5	V
Breakdown Voltage	V_{BR}	I_T=1mA	6			V
Reverse Leakage Current	I_R	V_{RWM}=5V			0.1	μA
Clamping Voltage	V_C	I_{PP}=1A (8 x 20μs pulse)			15	V
		I_{PP}=6A (8 x 20μs pulse)			25	V
Junction Capacitance	C_J	V_R=0V, f=1MHz		0.3	0.5	pF

7.Typical Characteristic

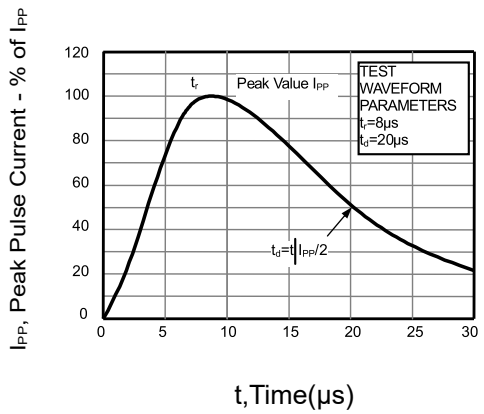


Figure 1: 8/20μs Pulse Waveform

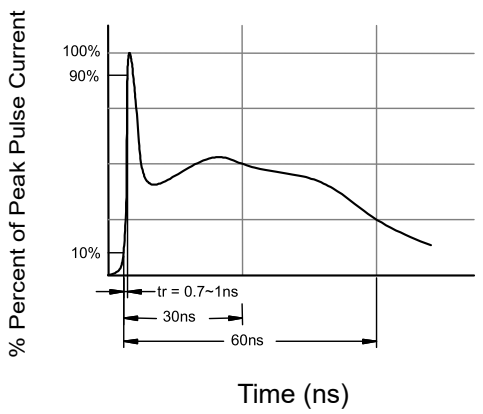


Figure 2: ESD Pulse Waveform (according to IEC 61000-4-2)

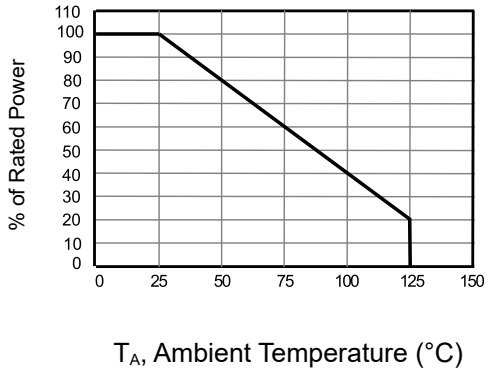
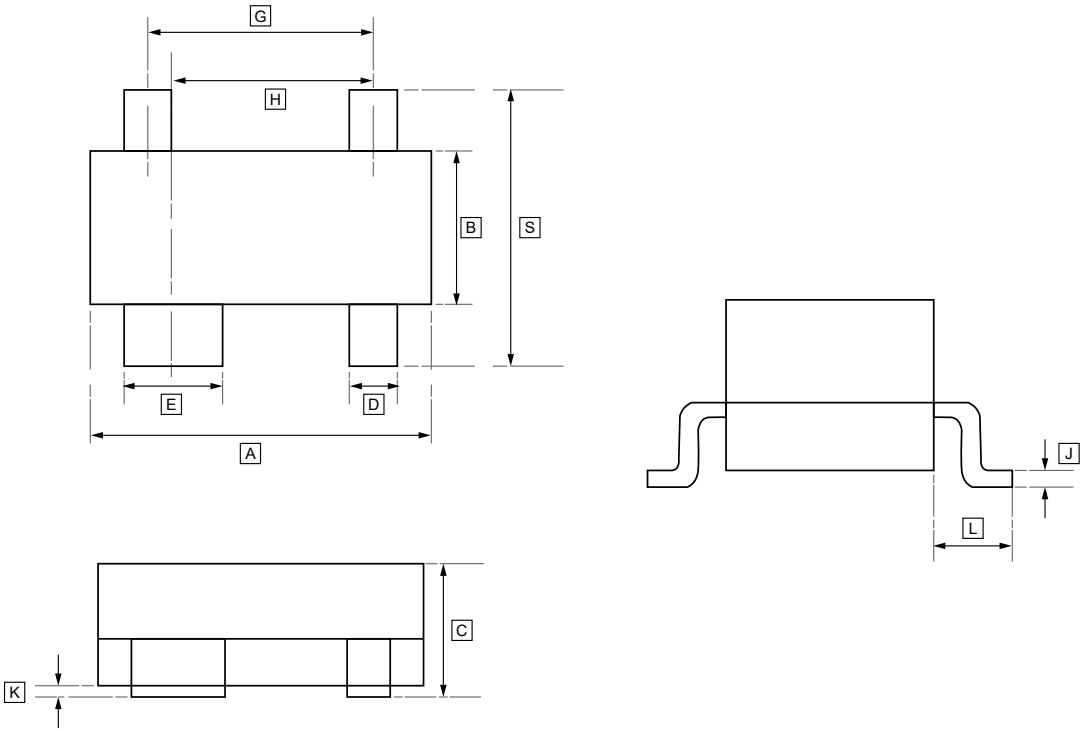


Figure 3: Power Derating Curve

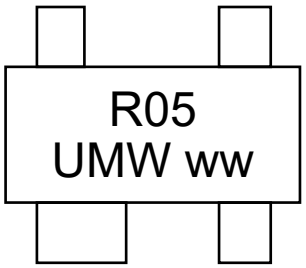
8.SOT-143 Package Outline Dimensions



DIMENSIONS (mm are the original dimensions)

Symbol	A	B	C	D	E	G	H	J	K	L	S
Min	2.80	1.20	0.80	0.37	0.76	1.92	1.72	0.085	0.013	0.254	2.10
Max	3.04	1.40	1.20	0.510	0.940	BSC	BSC	0.180	0.10	0.55	2.64

9.Ordering Information



ww: Batch Code

Order Code	Package	Base QTY	Delivery Mode
UMW SR05	SOT-143	3000	Tape and reel

10.Disclaimer

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