

1.Features

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

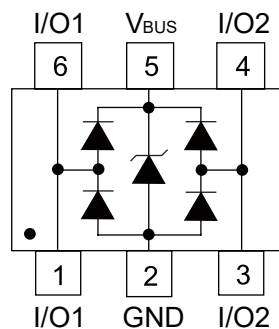
2.Applications

- 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-563

4.Pinning information



SOT-563



5. Absolute Maximum Ratings ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

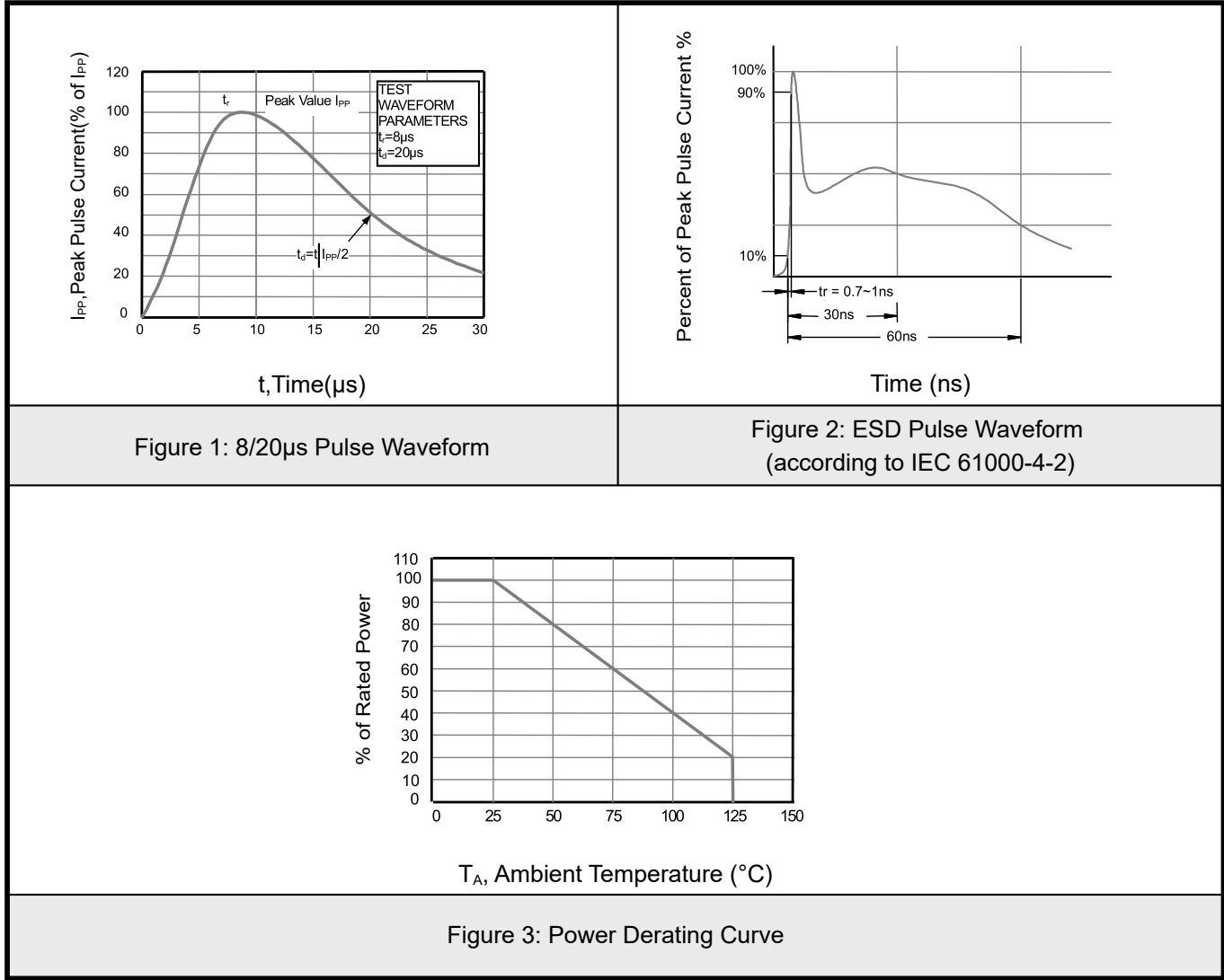
Parameter	Symbol	Value	Units
Peak Pulse Power (8/20 μs)	P_{PK}	100	W
Peak Pulse Current (8/20 μs)	I_{PP}	5	A
ESD per IEC 61000-4-2(Air)	V_{ESD}	± 30	kV
ESD per IEC 61000-4-2(Contact)		± 30	kV
Junction Temperature Range	T_J	-55 to 125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to 150	$^{\circ}\text{C}$

6. Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Working Voltage	V_{RWM}				5	V
Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	6.5			V
Reverse Leakage Current	I_R	$V_{RWM}=5\text{V}$			0.08	μA
Clamping Voltage	V_C	$I_{PP}=1\text{A}$ (8 x 20 μs pulse)			10	V
		$I_{PP}=4.5\text{A}$ (8 x 20 μs pulse)			16	V
Junction Capacitance	C_J	$V_R=0\text{V}$, $f=1\text{MHz}$ (IO to GND)		0.8	0.9	pF
		$V_R=0\text{V}$, $f=1\text{MHz}$ (IO to IO)		0.3		pF

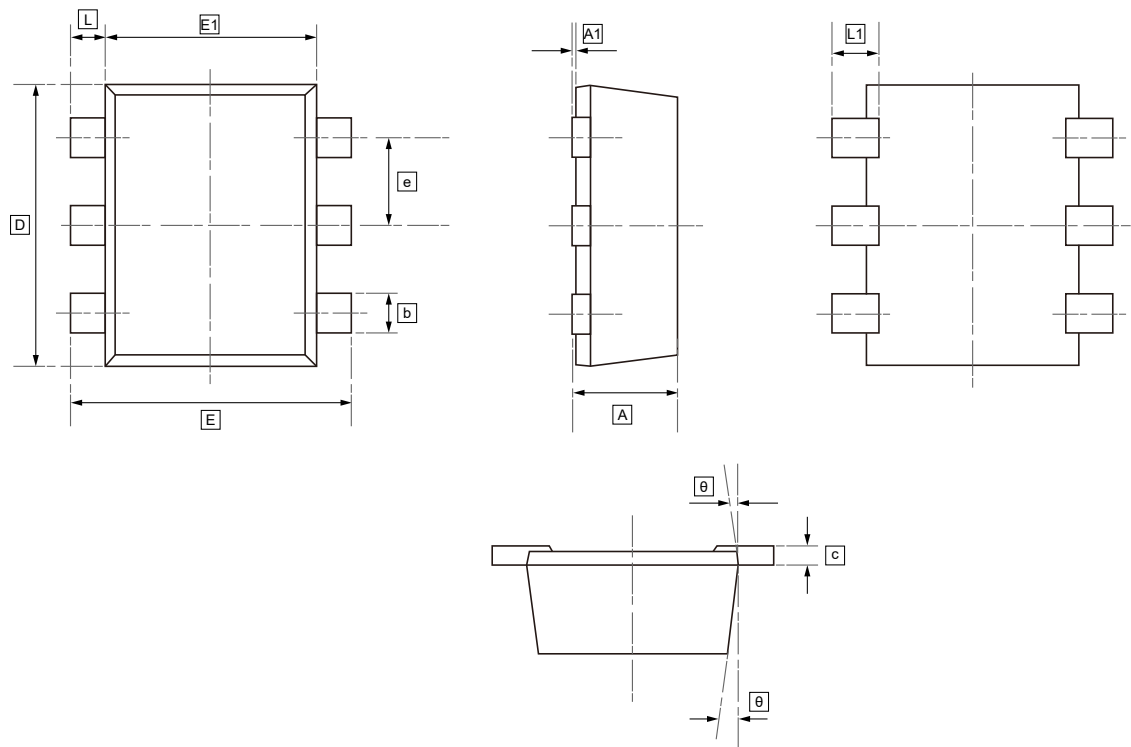


7. Typical characteristic





8.SOT-563 Package Outline Dimensions

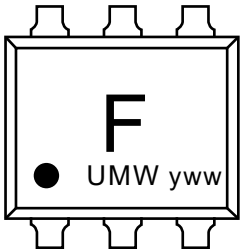


DIMENSIONS (mm are the original dimensions)

Symbol	A	A1	e	c	D	b	E1	E	L	L1	θ
Min	0.525	0.000	0.450	0.090	1.500	0.170	1.100	1.500	0.100	0.200	7°
Max	0.600	0.050	0.550	0.160	1.700	0.270	1.300	1.700	0.300	0.400	REF



9.Ordering information



y: Year Code
ww: Week Code

Order Code	Package	Base QTY	Delivery Mode
UMW USBLC6-2P6	SOT-563	3000	Tape and reel



10.Disclaimer

UMW reserves the right to make changes to all products, specifications. Customers should obtain the latest version of product documentation and verify the completeness and currency of the information before placing an order.

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