UMW PUSB2X4Y

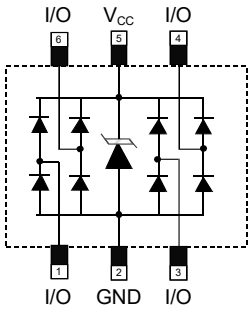
1.Features

- 60Watts peak pulse power (t_p=8/20μs)
- Low clamping voltage
- Low leakage current
- Low capacitance (C_j=0.2pF typ.)
- Protection one data/power line
- IEC 61000-4-2 ±15kV contact ±20kV air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 3.5A (8/20μs)

2.Applications

- Ethernet
- Digital Visual Interface (DVI)
- USB2.0
- Notebook and PC Computers

3.Pinning information



SOT-363

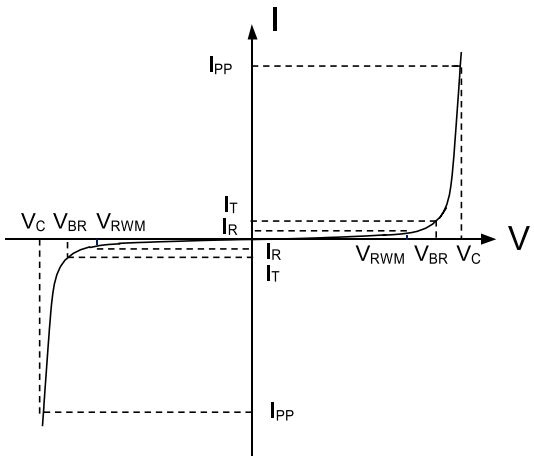
4.Absolute Maximum Ratings

Parameter	Symbol	Value	Units
Peak Pulse Power (t_p=8/20μs)	P_{PP}	60	W
Peak Pulse Current (t_p=8/20μs)(note1)	I_{PP}	3.5	A
ESD per IEC 61000-4-2(Air)	V_{ESD}	20	kV
ESD per IEC 61000-4-2(Contact)		15	kV
Lead Soldering Temperature	T_L	260(10seconds)	°C
Junction Temperature	T_J	-55 to 125	°C
Storage Temperature	T_{STG}	-55 to 125	°C

5.Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	I_T=1mA	6			V
Reverse Leakage Current	I_R	V_{RWM}=5V, T=25°C		50	500	nA
Peak Pulse Current	I_{PP}	t_p=8/20μs			3	A
Clamping Voltage	V_C	I_{PP}=3.5A, t_p=8/20μs		15	18	V
Junction Capacitance	C_J	V_R=0V, f=1MHz, IO to IO		0.2	0.25	pF
		V_R=0V, f=1MHz, IO to GND		0.35	0.5	pF

6.Electrical Parameters (T_A=25°C unless otherwise noted)



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

Notes: 8/20μs pulse waveform.

7.Typical characteristic

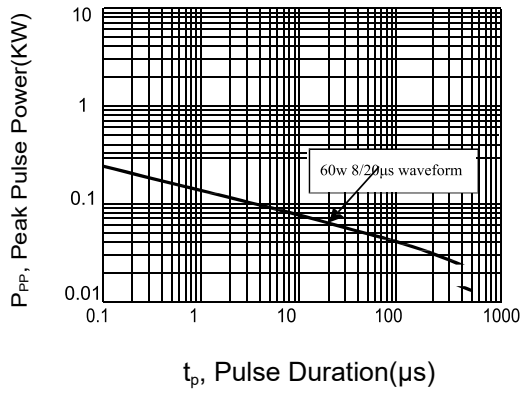


Figure 1: Peak Pulse Power Rating Curve

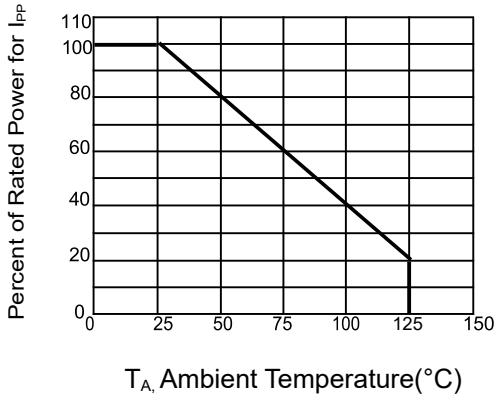


Figure 2: Pulse Derating Curve

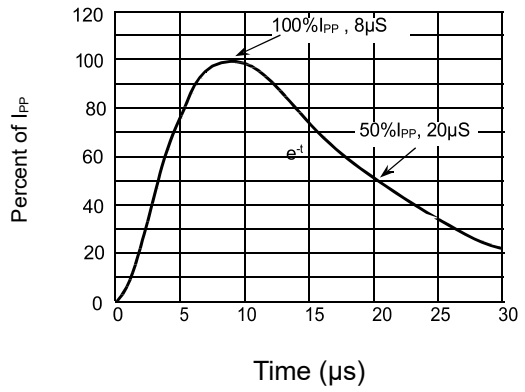


Figure 3: Pulse Waveform-8/20μs

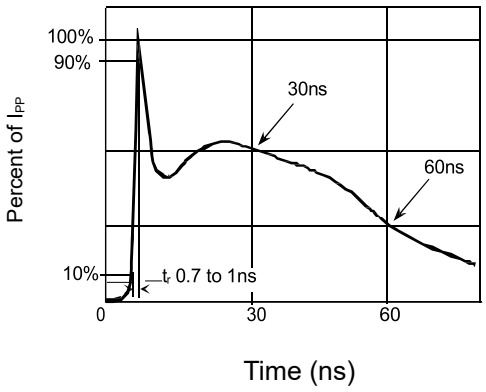


Figure 4: Pulse Waveform-ESD(IEC61000-4-2)

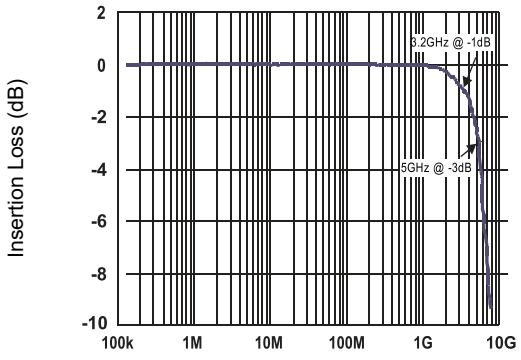
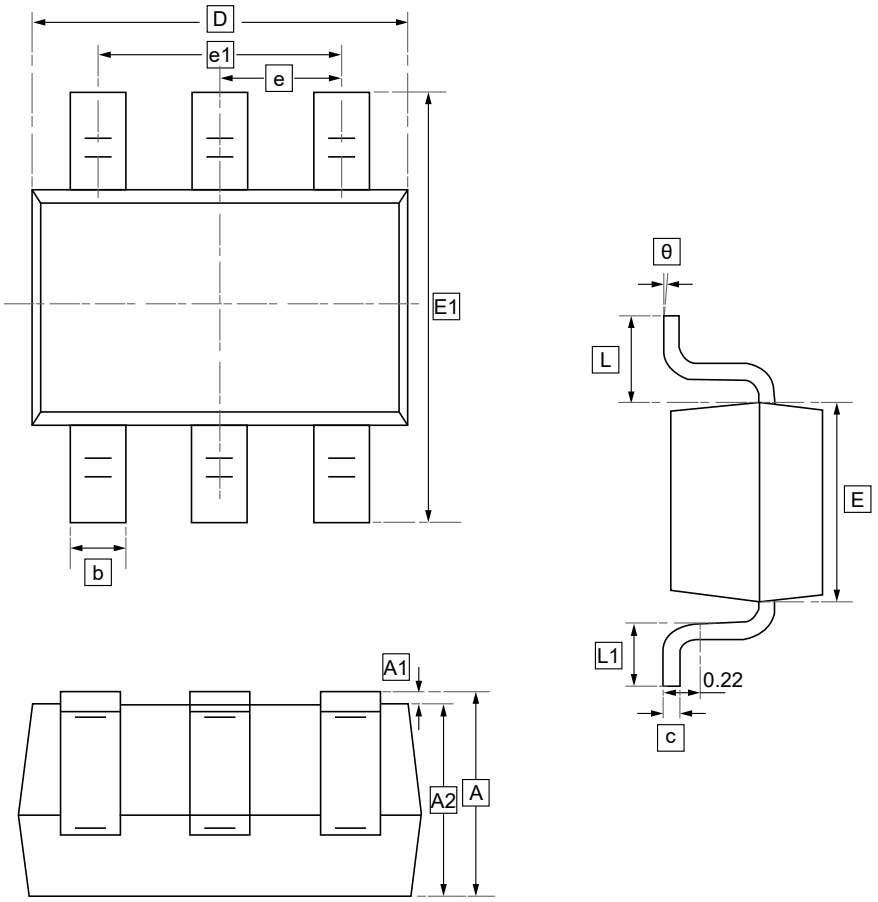


Figure 5: Insertion Loss S21 - I/O to GND

9.SOT-363 Package Outline Dimensions

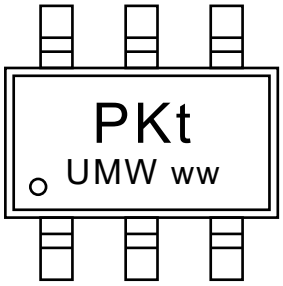


DIMENSIONS (mm are the original dimensions)

Symbol	A	A1	A2	b	c	D	E	E1	e	e1	L	L1
Min	0.900	0.000	0.900	0.150	0.080	2.000	1.150	2.150	0.65	1.200	0.525	0.260
Max	1.100	0.100	1.000	0.350	0.150	2.200	1.350	2.450	TYP	1.400	REF	0.460

Symbol	θ
Min	0°
Max	8°

9.Ordering information



ww: Batch Code

Order Code	Package	Base QTY	Delivery Mode
UMW PUSB2X4Y	SOT-363	3000	Tape and reel

10.Disclaimer

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