

1.Features

- 45W peak pulse power ($t_p=8/20\mu s$)
- Tiny X1SON-2 package
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance ($C_j=0.7pF$ typ.)
- Protection one data/power line
- IEC 61000-4-2 $\pm 10kV$ contact $\pm 15kV$ air
- IEC 61000-4-4 (EFT) 40A(5/50ns)
- IEC 61000-4-5 (Lightning) 3.5A(8/20 μs)

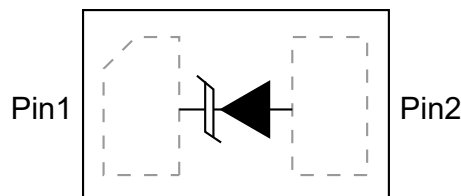
2.Applications

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation

3.Mechanical Data

- X1SON-2 package
- Molding compound flammability
rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

4.Pinning information



X1SON-2



5. Absolute Maximum Rating

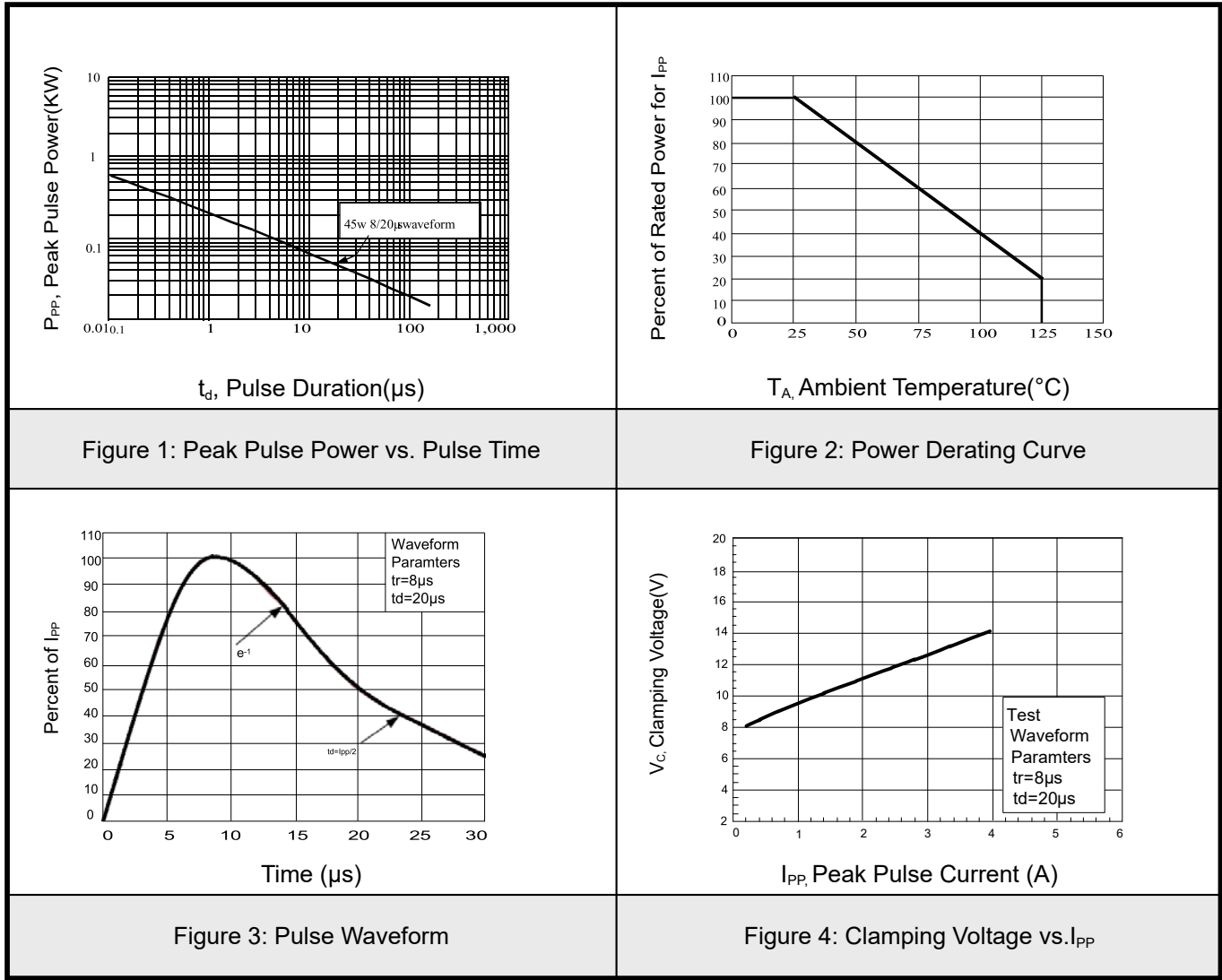
Parameter	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	45	W
Peak Pulse Current ($t_p=8/20\mu s$)(note1)	I_{PP}	3.5	A
ESD per IEC 61000-4-2(Air)	V_{ESD}	15	kV
ESD per IEC 61000-4-2(Contact)		10	kV
Lead Soldering Temperature	T_L	260(10seconds)	°C
Junction Temperature	T_J	-55 to 125	°C
Storage Temperature	T_{STG}	-55 to 125	°C

6. 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	7.5		V
Reverse Leakage Current	I_R	$V_{RWM}=5V, T=25^\circ C$		0.1	0.5	μA
Peak Pulse Current	I_{PP}	$t_p=8/20\mu s$			3.5	A
Clamping Voltage	V_C	$I_{PP}=3.5A, t_p=8/20\mu s$		12	15	V
Junction capacitance	C_J	$V_R=0V, f=1MHz$		0.7	0.9	pF

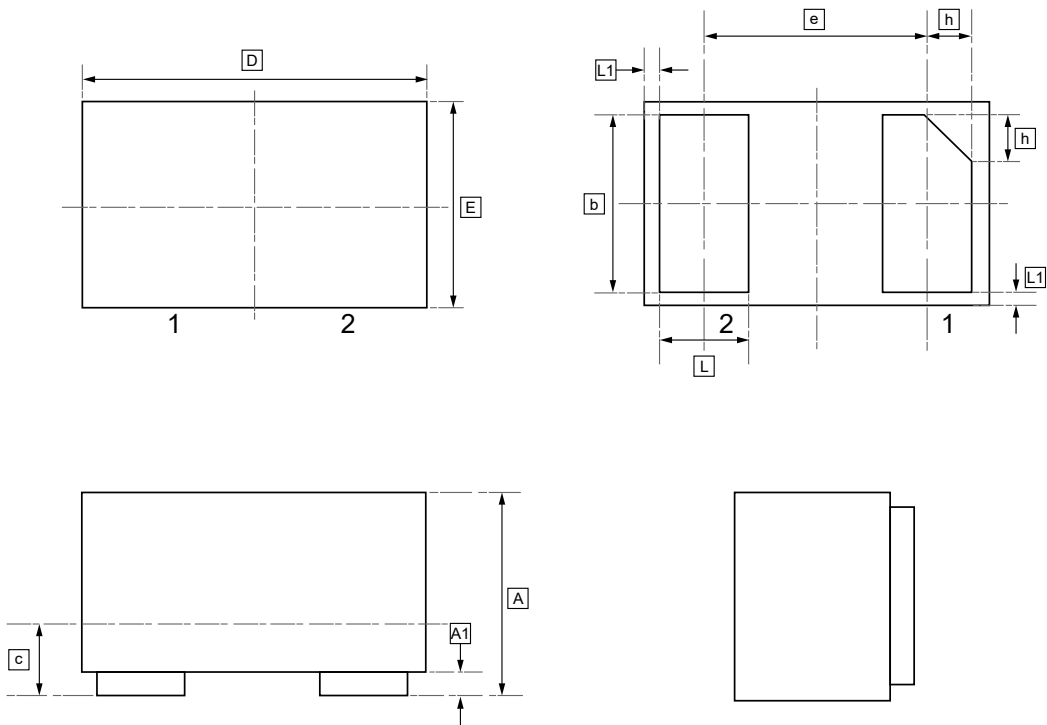


7. Typical characteristic





8.X1SON-2 Package Outline Dimensions



DIMENSIONS (mm are the original dimensions)

Symbol	A	A1	b	c	D	e	E	L	L1	h
Min	0.45	0.00	0.45	0.12	0.95	0.65	0.55	0.20	0.05	0.07
Max	0.55	0.05	0.55	0.18	1.05	BSC	0.65	0.30	REF	0.17



9.Ordering information



Order Code	Package	Base QTY	Delivery Mode
UMW TPD1E05U06DPYR	X1SON-2	10000	Tape and reel



10.Disclaimer

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