

1.Features

- 40W peak pulse power ($t_p=8/20\mu s$)
- Tiny SOT143 package
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance ($C_j=0.35pF$ typ I/O to I/O.)
- Protection one data/power line
- IEC 61000-4-2 $\pm 15kV$ contact $\pm 20kV$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 3.5A (8/20 μs)

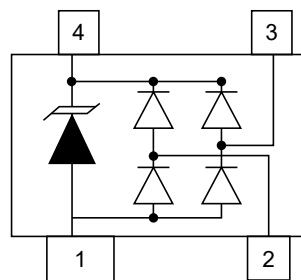
2.Applications

- USB2.0,
- Ethernet
- Notebooks, Desktops, and Servers
- Video Line Protection

3.Mechanical Data

- SOT-143 package
- Molding compound flammability rating: UL94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

4.Pinning information



SOT-143



5. Absolute Maximum Ratings

Parameter	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	40	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}	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

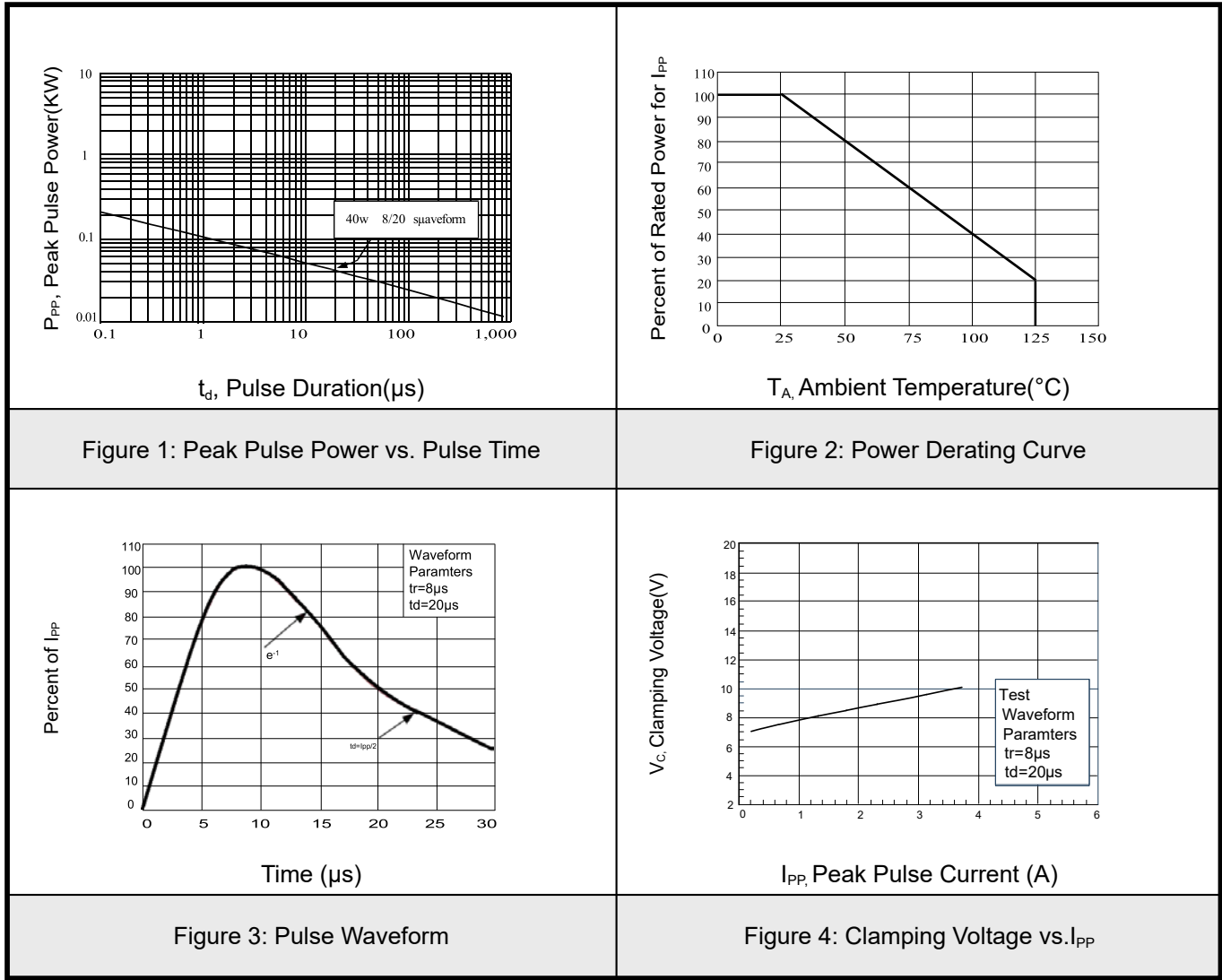


6. Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6	7.2		V
Reverse Leakage Current	I_R	$V_{RWM}=5V$, $T=25^{\circ}C$		50	500	nA
Clamping Voltage	V_C	$I_{PP}=3.5A$, $t_p=8/20\mu s$		10		V
Junction capacitance	C_J	$V_R=0V$, $f=1MHz$, IO to IO		0.35		pF
		$V_R=0V$, $f=1MHz$, IO to GND		0.65		pF

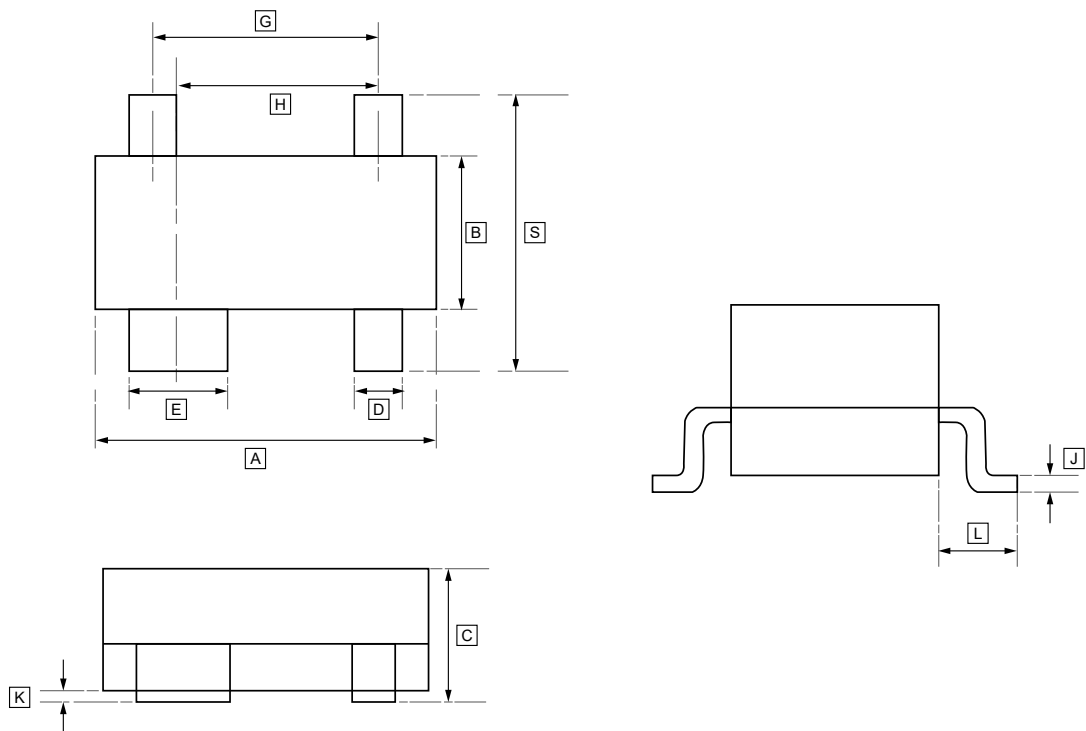


7. Typical characteristic





8.SOT-143 Package Outline Dimensions

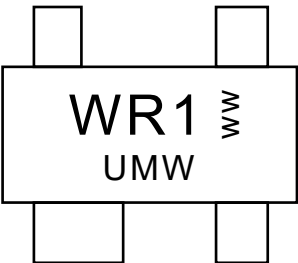


DIMENSIONS (mm are the original dimensions)

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



Order Code	Package	Base QTY	Delivery Mode
UMW PRTR5V0U2X	SOT-143	3000	Tape and reel



10.Disclaimer

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