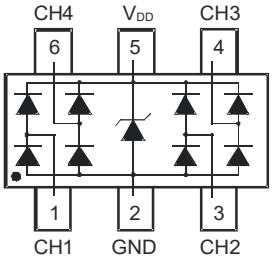
1.Features

- IEC 61000-4-2 (ESD): Air ±15kV, Contact ±8kV
- Low Channel Input Capacitance of 0.5pF Typical
- 4 Channels of ESD Protection
- Typically Used at High Speed Ports such as USB 2.0, USB3.0, IEEE1394, Serial ATA, DVI, HDMI, PCI

2.Pinning information



SOT-363

3.Maximum Ratings (T_A=25°C, unless otherwise specified.)

Parameter	Symbol	Conditions	Value	Units
Peak Pulse Current	I_{PP}	8/20μs, Figure 3	3	A
ESD Protection – Contact Discharge	$V_{ESD_Contact}$	Standard IEC 61000-4-2	±8	kV
ESD Protection – Air Discharge	V_{ESD_Air}	Standard IEC 61000-4-2	±15	kV

4.Thermal Characteristics

Parameter	Symbol	Value	Units
Power Dissipation (Note 5)	P_D	200	mW
Thermal Resistance, Junction to Ambient (Note 5)	$R_{\theta JA}$	625	°C/W
Junction and Storage Temperature Range	T_J,T_{STG}	-55 to 150	°C

5.Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Working Voltage	V_{RWM}				5.5	V
Reverse Current (Note 6)	I_R	V_R=5.5V			200	nA
Reverse Breakdown Voltage	V_{BR}	I_R=1mA	6			V
Reverse Clamping Voltage, Positive Transients (Note 7)	V_{CL}	I_{PP}=1A, t_p=8/20μs		10	12	V
Dynamic Resistance	R_{DYN}	I_R=1A, t_p=8/20μs		1		Ω
Capacitance (Note 8)	C_T	V_R=2.5V, f=1MHz		0.4	0.65	pF
		V_R=0V, f=1MHz		0.5		pF

Notes:

1. Short duration pulse test used to minimize self-heating effect.
2. Clamping voltage value is based on an 8x20μs peak pulse current (I_{pp}) waveform.
3. Measured from any CH to GND.

6.Typical characteristic

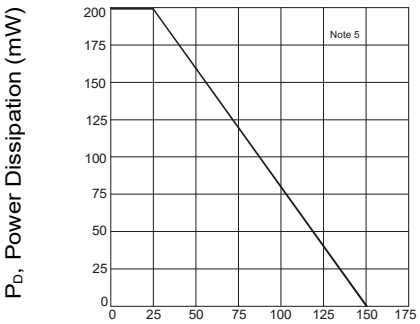


Figure 1: Power Derating Curve

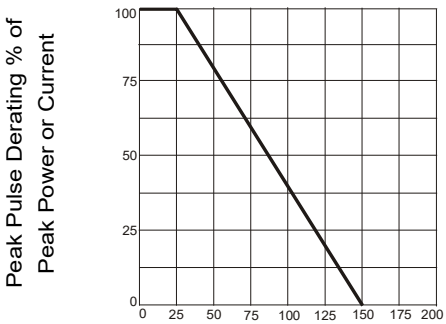


Figure 2: Pulse Derating Curve

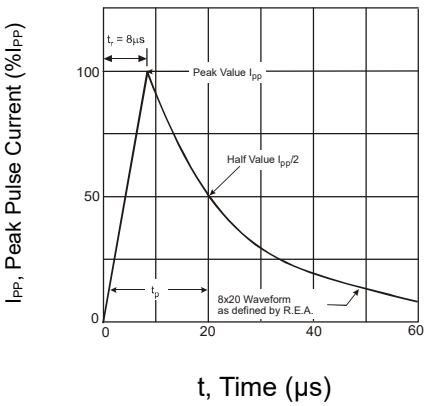


Figure 3: Pulse Waveform

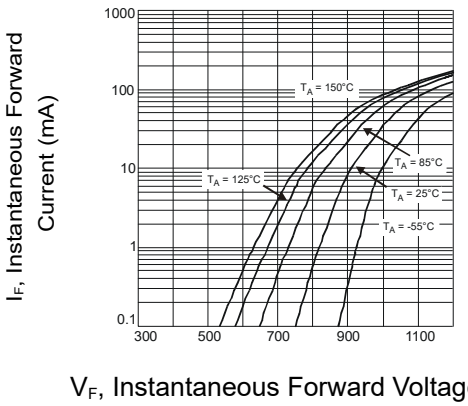


Figure 4: Typical Forward Characteristics

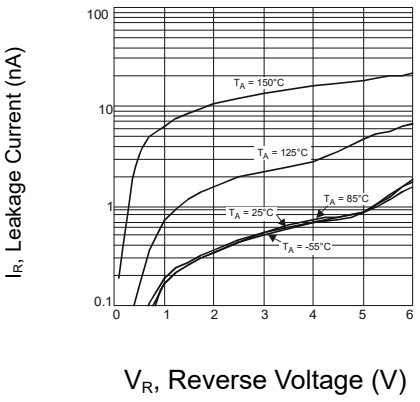


Figure 5: Typical Reverse Characteristics

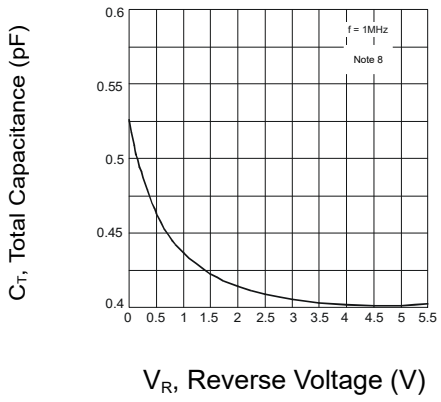
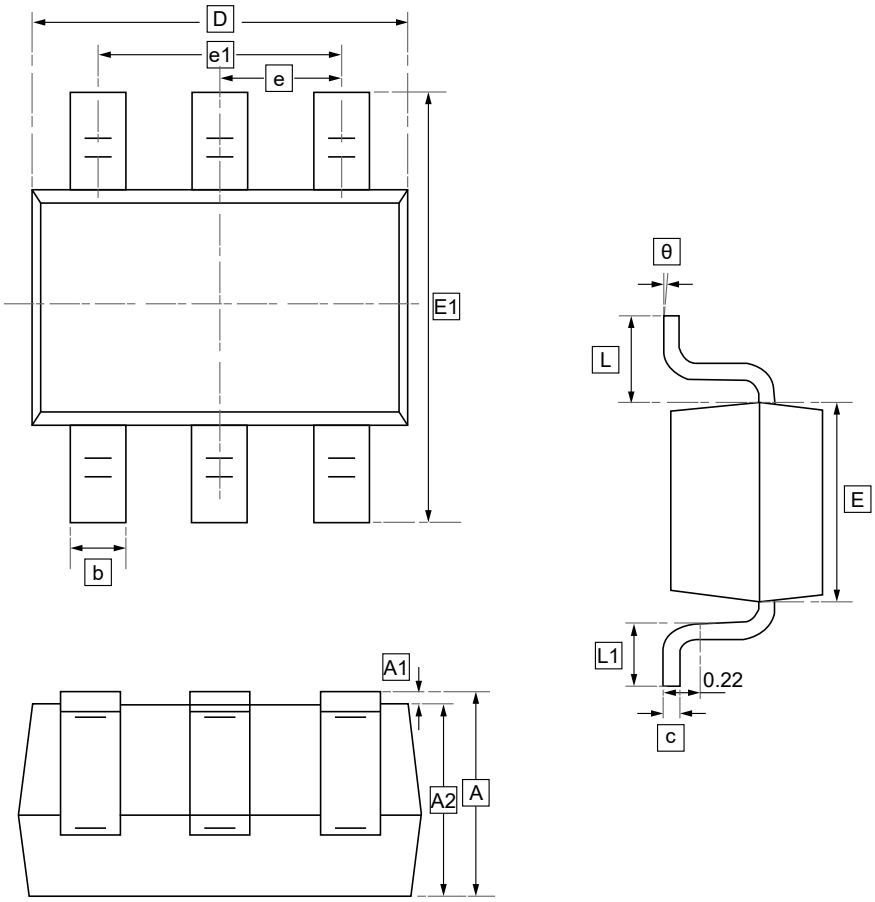


Figure 6: Total Capacitance vs. Reverse Voltage

7.SOT-363 Package Outline Dimensions

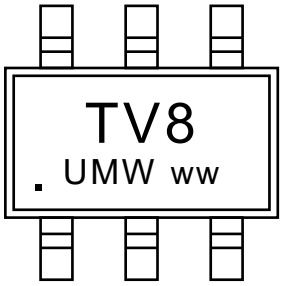


DIMENSIONS (mm are the original dimensions)

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°

8.Ordering information



ww: Batch Code

Order Code	Package	Base QTY	Delivery Mode
UMW D5V0F4U6S-7	SOT-363	3000	Tape and reel

9.Disclaimer

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