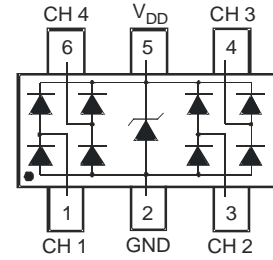


**Features**

- IEC 61000-4-2 (ESD): Air ±15kV, Contact ±8kV
- 4 Channels of ESD Protection
- Low Channel Input Capacitance of 1.0pF Typical  
Typically Used at High Speed Ports such as USB 2.0,
- IEEE1394, Serial ATA, DVI, HDMI, PCI



Device Schematic

**Maximum Ratings** (@T<sub>A</sub> = +25°C, unless otherwise specified)

Characteristic	Symbol	Value	Unit	Conditions
Peak Pulse Current	I <sub>pp</sub>	5	A	8/20μs, Per Figure 2
ESD Protection – Contact Discharge	V <sub>ESD_Contact</sub>	±8	kV	Standard IEC 61000-4-2
ESD Protection – Air Discharge	V <sub>ESD_Air</sub>	±15	kV	Standard IEC 61000-4-2

**Thermal Characteristics**

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5)	P <sub>D</sub>	200	mW
Thermal Resistance, Junction to Ambient (Note 5)	R <sub>θJA</sub>	625	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150	°C

**Electrical Characteristics** (@T<sub>A</sub> = +25°C, unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Reverse Standoff Voltage	V <sub>RWM</sub>			5.5	V	
Channel Leakage Current (Note 6, 7)	I <sub>R</sub>		1	100	nA	V <sub>R</sub> = 3V
Reverse breakdown voltage	V <sub>BR</sub>	6.0		9.0	V	I <sub>R</sub> = 1mA, from pin 5 to pin 2
Forward Voltage	V <sub>F</sub>		0.8		V	I <sub>F</sub> = 8mA
Dynamic Resistance	R <sub>DYN</sub>		0.9		Ω	I <sub>PP</sub> = 1A, t <sub>p</sub> = 8/20μs
I/O to GND Capacitance	C <sub>(I/O-GND)</sub>		1.0	1.5	pF	V <sub>(I/O-GND)</sub> = 0V, f = 1MHz
I/O to I/O Capacitance	C <sub>(I/O-I/O)</sub>		0.6		pF	V <sub>(I/O-I/O)</sub> = 0V, f = 1MHz

Notes:

1. Short duration pulse test used to minimize self-heating effect.
2. Measured from pin 1, 3, 4, 5 and 6 to GND.

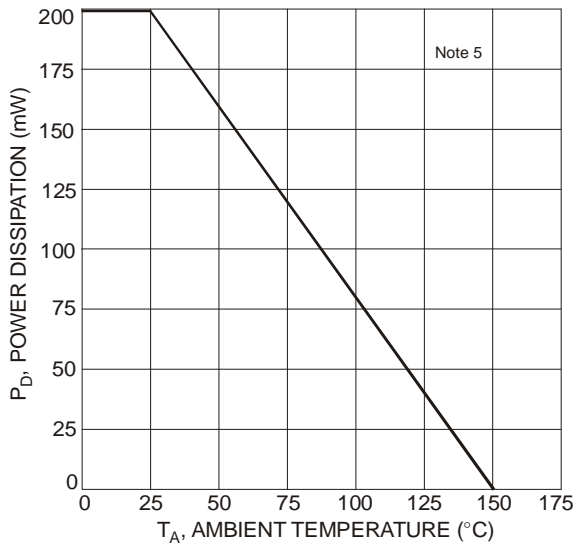


Figure 1 Power Derating Curve

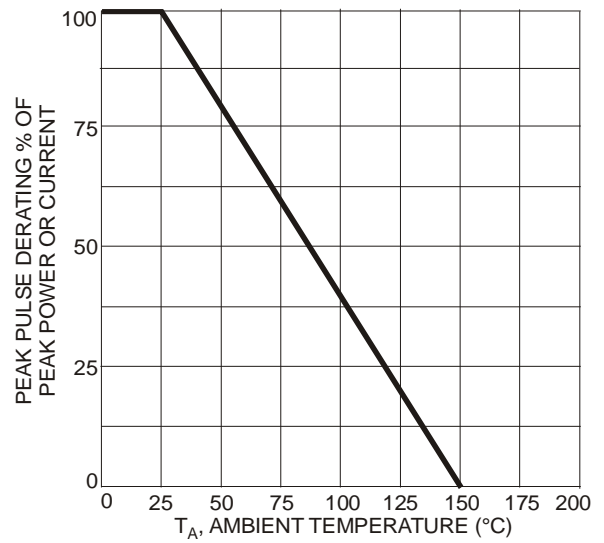


Figure 2 Pulse Derating Curve

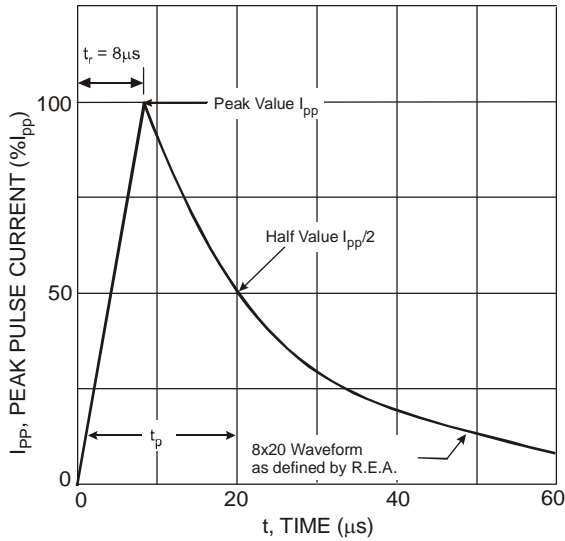


Figure 3 Pulse Waveform

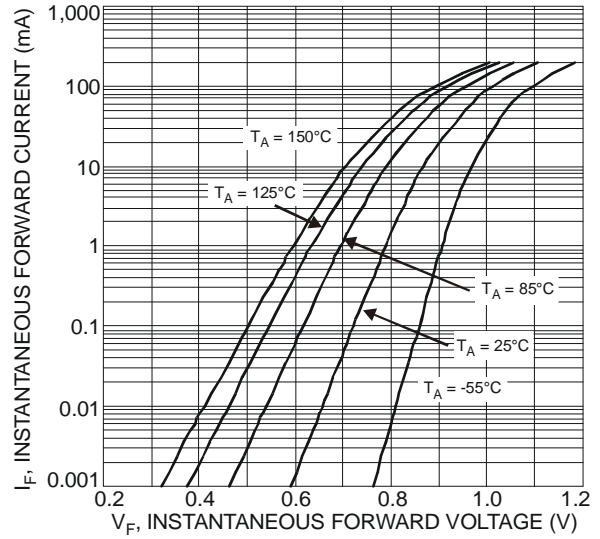


Figure 4 Typical Forward Characteristics

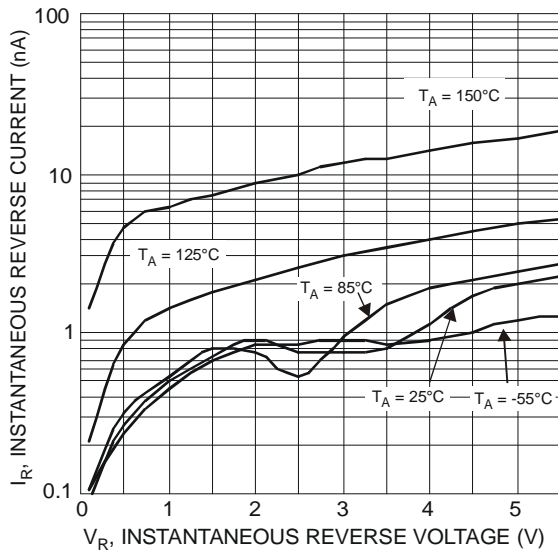


Figure 5 Typical Reverse Characteristics

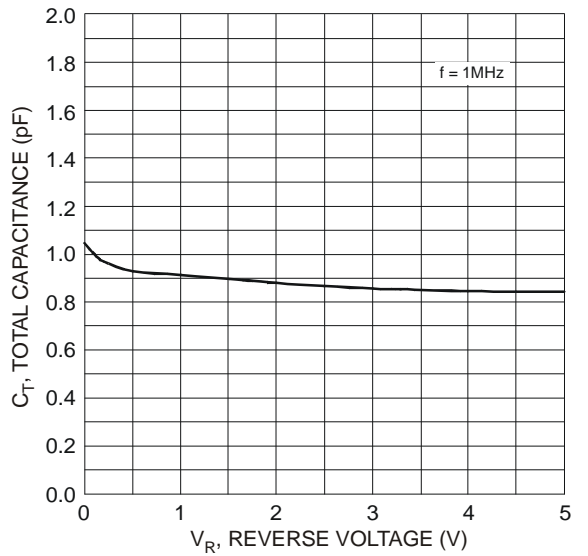
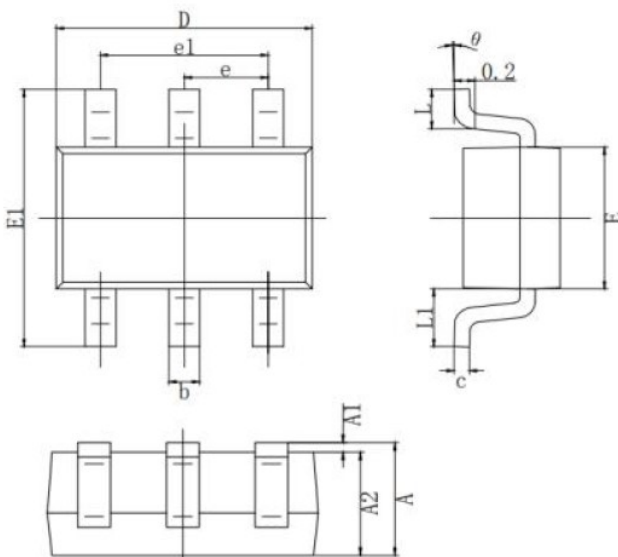


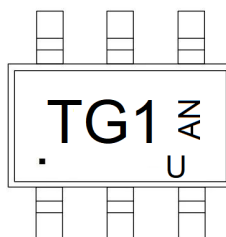
Figure 6 Typical Total Capacitance vs. Reverse Voltage

SOT-363 PACKAGE OUTLINE DIMENSIONS



SYMBOL	MILLIMETER	
	MIN	MAX
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.080	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.450
e	0.650 TYP.	
e1	1.200	1.400
L	0.525 REF.	
L1	0.260	0.460
θ	0°	8°

Marking



Ordering information

Order code	Package	Base qty	Delivery mode
UMW DRTR5V0U4S-7	SOT-363	3000	Tape and reel