# UMW ESDA6V1-5W6

## 1.Features

- Complies with following standards:
  – IEC 61000-4-2 (ESD) immunity test
  Air discharge: ±25kV
  Contact discharge: ±16kV
  – IEC61000-4-4 (EFT) 40A (5/50ns)
  – IEC61000-4-5 (Lightning) 5A (8/20μs)
- Ultra low leakage: nA level
- Operating voltage: 5V
- Low clamping voltage
- RoHS Compliant

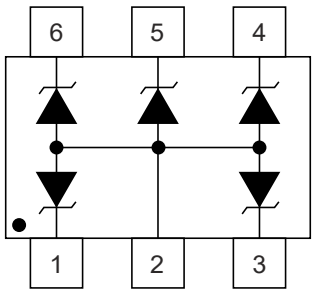
## 2.Applications

- USB 2.0 power and data line
- Set-top box and digital TV
- Digital video interface (DVI)
- Notebook Computers
- SIM Ports
- 10/100 Ethernet

## 3.Mechanical Characteristics

- Package: SOT-363
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel:3,000pcs
- Reel Size:7inch

## 4.Pinning information




**SOT-363**

## 5.Absolute Maximum Ratings($T_{amb}$=25°C unless otherwise specified)

| Parameter | Symbol | Value | Units |
|---|---|---|---|
| Peak Pulse Power (8/20μs) | $P_{PK}$ | 100 | W |
| ESD per IEC 61000-4-2 (Air) | $V_{ESD}$ | ±25 | kV |
| ESD per IEC 61000-4-2 (Contact) | | ±16 | kV |
| Junction Temperature Range | $T_J$ | -55 to 125 | °C |
| Storage Temperature Range | $T_{STG}$ | -55 to 150 | °C |

## 6.Absolute Maximum Ratings($T_{amb}$=25°C unless otherwise specified)

| Part Number | Device Marking | $V_{RWM}$ (V) | $V_{BR}$ (V) | $I_T$ (mA) | $V_C$ @1A | $V_C$ | | $I_R$ μA (Max) | C (Pf) (Typ.) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | (Max) | (@A) | | |
| ESDA6V1-5W6 | WF | 5 | 6 | 1 | 9.8 | 12.5 | 5 | 1 | 50 |

## 7.Typical characteristic

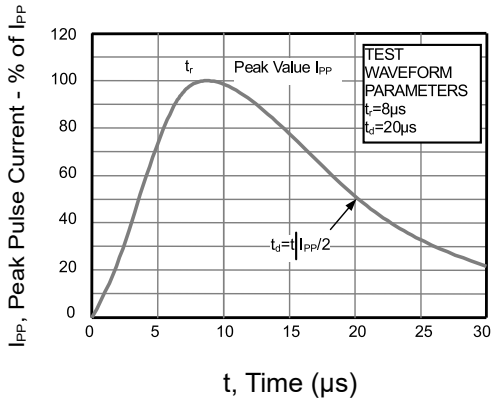



Figure 1: 8/20μs Pulse Waveform

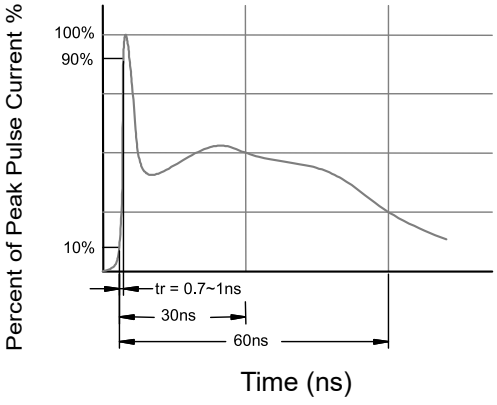



Figure 2: ESD Pulse Waveform
(according to IEC 61000-4-2)

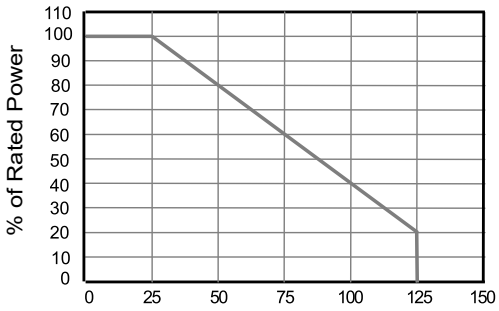
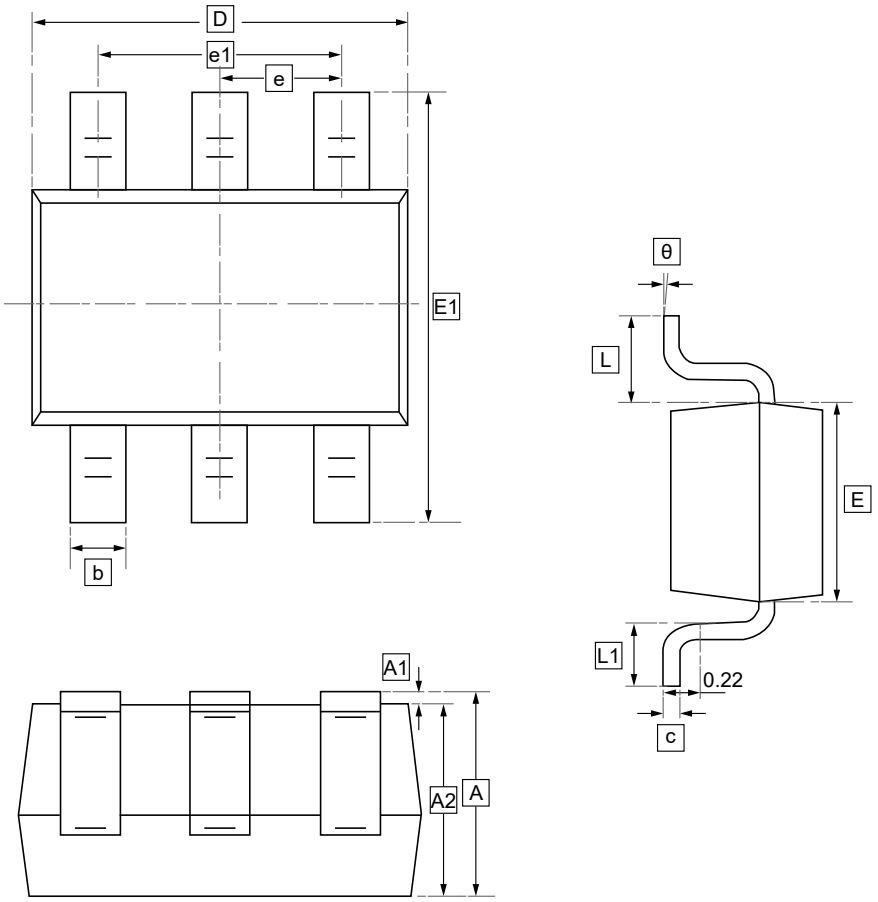



Figure 3: Power Derating Curve

## 8.SOT-363 Package Outline Dimensions

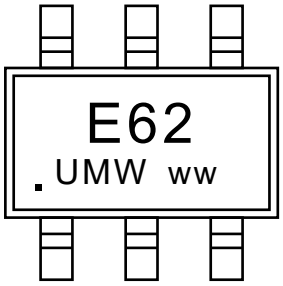



**DIMENSIONS (mm are the original dimensions)**

| 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 ESDA6V1-5W6 | SOT-363 | 3000 | Tape and reel |



## 10.Disclaimer

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