

1.Features

- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: ±30kV
 - Contact discharge: ±30kV
- RoHS Compliant
- Low leakage current
- Operating voltage: 3.3V
- Low clamping voltage
- Protecting 4 unidirectional line

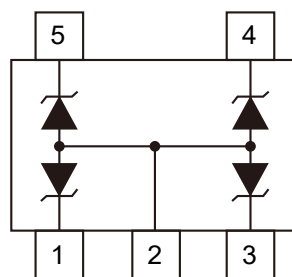
2.Applications

- Peripherals
- Industrial Equipment
- Notebook Computers
- Portable Instrumentation
- Microprocessor Based Equipment
- Cell Phone Handsets and Accessories
- Personal Digital Assistants (PDAs) and Pagers

3.Mechanical Characteristics

- Package: SOT-353
- Lead Finish: Matte Tin
- Moisture Sensitivity: Level 3 per J-STD-020

4.Pinning information



SOT-353



5. Absolute Maximum Rating

| Parameter | Symbol | Value | Units |
|---------------------------------|-----------|------------|--------------------|
| Peak Pulse Power (8/20 μ s) | P_{PP} | 100 | W |
| ESD per IEC 61000-4-2 (Air) | V_{ESD} | ± 30 | kV |
| ESD per IEC 61000-4-2 (Contact) | | ± 30 | kV |
| Junction Temperature Range | T_J | -55 to 125 | $^{\circ}\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to 150 | $^{\circ}\text{C}$ |

6. Electrical Characteristics ($T_A=25^{\circ}\text{C}$ 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) | | |
| PESD3V3L4UG | L1W | 3.3 | 4.5 | 1 | 8 | 12 | 8 | 0.2 | 60 |

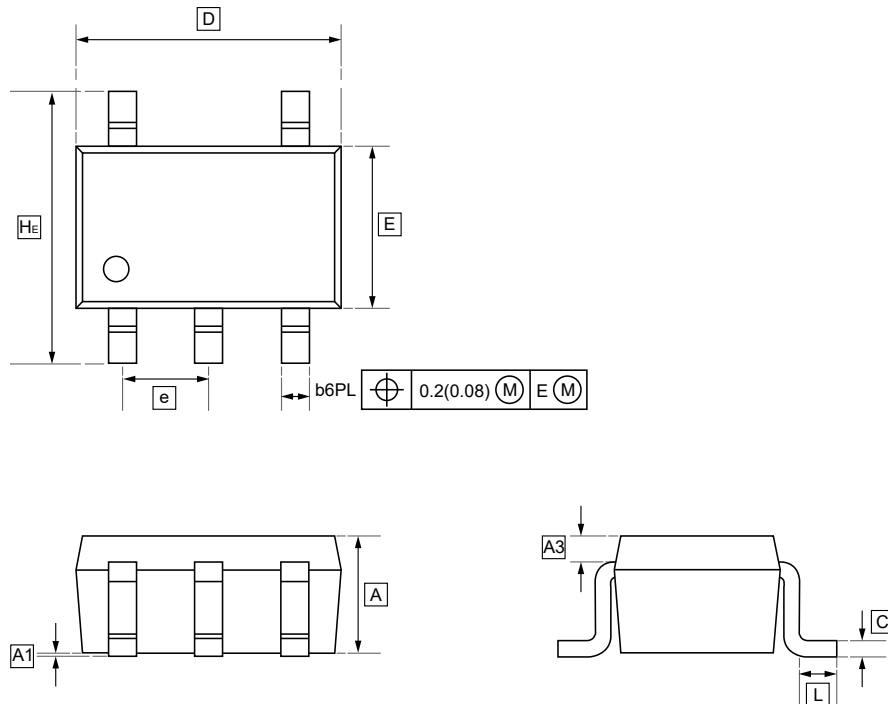


7. Typical characteristic

| | |
|--|---|
| <p style="text-align: center;">V_R, Reverse Voltage (V)</p> | <p style="text-align: center;">t_p, Pulse Duration (μs)</p> |
| <p>Figure 1: Junction Capacitance vs. Reverse Voltage</p> | <p>Figure 2: Peak Pulse Power vs. Pulse Time</p> |
| <p style="text-align: center;">I_{PP}, Peak Pulse Current (A)</p> | <p style="text-align: center;">T_A, Ambient Temperature ($^{\circ}$C)</p> |
| <p>Figure 3: Clamping Voltage vs. Peak Pulse Current</p> | <p>Figure 4: Power Derating Curve</p> |
| <p style="text-align: center;">t, Time(μs)</p> | <p style="text-align: center;">Data is taken with a 10x attenuator ESD Clamping Voltage</p> |
| <p>Figure 5: 8 X 20μs Pulse Waveform</p> | <p>Figure 6: 8kV Contact per IEC61000-4-2</p> |



8.SOT-353 Package Outline Dimensions

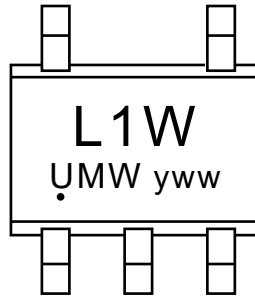


DIMENSIONS (mm are the original dimensions)

| Symbol | A | A1 | A3 | b | C | D | E | e | L | H _E |
|--------|------|------|-----|------|------|------|------|------|------|----------------|
| Min | 0.80 | 0.00 | 0.2 | 0.10 | 0.10 | 1.80 | 1.15 | 0.65 | 0.10 | 2.00 |
| Max | 1.10 | 0.10 | REF | 0.30 | 0.25 | 2.20 | 1.35 | BSC | 0.30 | 2.20 |



9. Ordering information



yww: Batch Code

| Order Code | Package | Base QTY | Delivery Mode |
|-----------------|---------|----------|---------------|
| UMW PESD3V3L4UG | SOT-353 | 3000 | Tape and reel |



10.Disclaimer

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