

1. Features

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

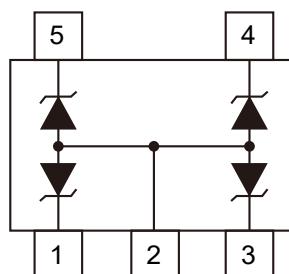
2. Applications

- 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 (8/20μs) | 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 | °C |
| Storage Temperature Range | T_{STG} | -55 to 150 | °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 | F05 | 3.3 | 4.5 | 1 | 8 | 12 | 8 | 0.2 | 60 |



7.Typical characteristic

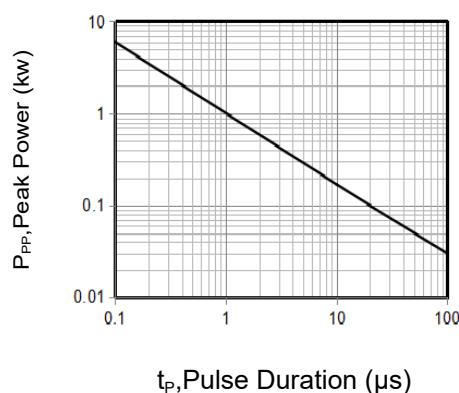
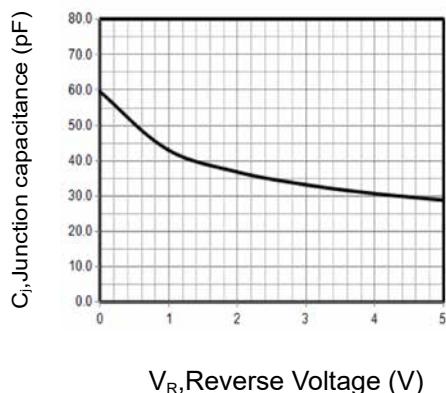


Figure 1: Junction Capacitance vs. Reverse Voltage

Figure 2: Peak Pulse Power vs. Pulse Time

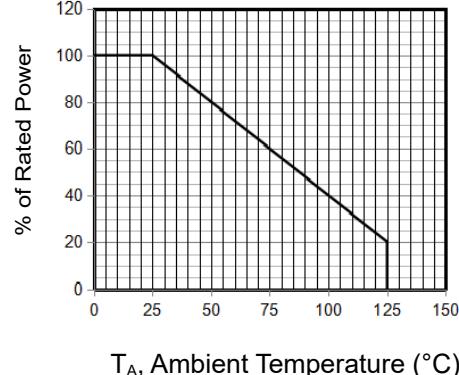
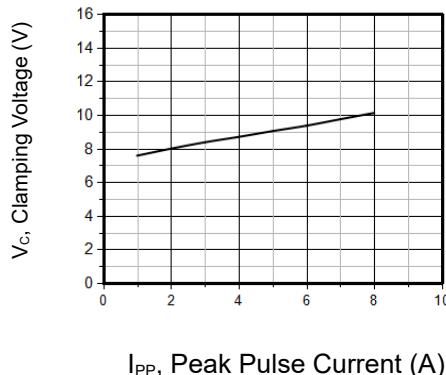


Figure 3: Clamping Voltage vs. Peak Pulse Current

Figure 4: Power Derating Curve

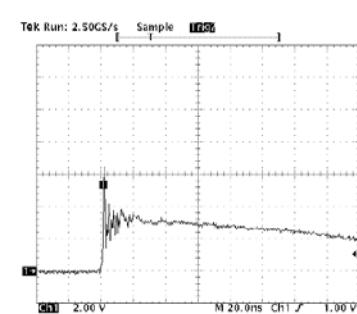
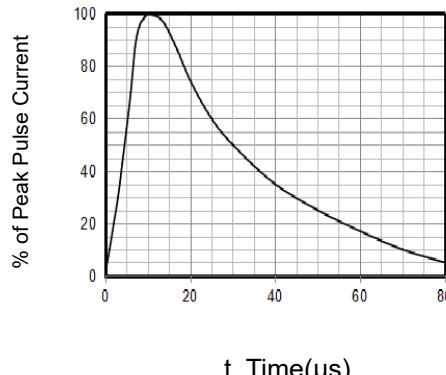
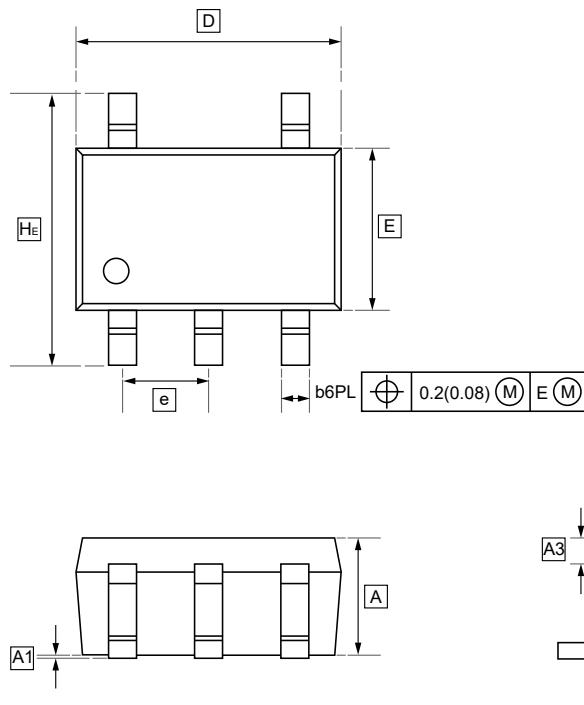
Data is taken with a 10x attenuator
ESD Clamping Voltage

Figure 5: 8 X 20μs Pulse Waveform

Figure 6: 8kV Contact per IEC61000-4-2



8.SOT-353 Package Outline Dimensions

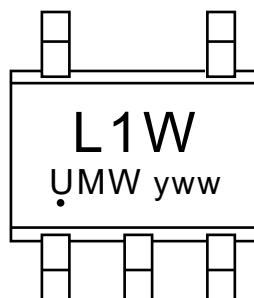


DIMENSIONS (mm are the original dimensions)

| 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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