



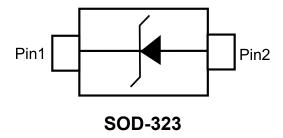
#### 1.Features

- EC61000-4-2(ESD)±30kV±30kV(air),(contact)
- IEC61000-4-4(EFT)40A(5/50ns)
- 350 Watts Peak Pulse Power per (tp=8/20us)
- Protects one I/O line (unidirectional)
- Low clamping voltage
- Working voltages: 3.3V to 36V
- Low leakage current

### 2.Applications

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable instrumentation
- Networking and Telecom
- Serial and Parallel Ports
- Peripherals

### 3. Pinning information



### 4. Absolute Maximum Ratings T<sub>A</sub>= 25°C

| Parameter                      | Symbol           | Maximum     | Units |
|--------------------------------|------------------|-------------|-------|
| ESD per IEC 61000-4-2 (Air)    | V                | ±30         | kV    |
| ESD per IEC 61000-4-2(Contact) | V <sub>ESD</sub> | ±30         | kV    |
| Peak Pulse Power (8/20us)      | P <sub>PP</sub>  | 350         | W     |
| Junction Temperature           | T <sub>OPT</sub> | -55 to 150  | °C    |
| Storage Temperature            | T <sub>STG</sub> | -55 to 150  | °C    |
| Lead Soldering Temperature     | TL               | 260(10sec.) | °C    |









# **5.Electrical Characteristics(Tamb=25°C)**

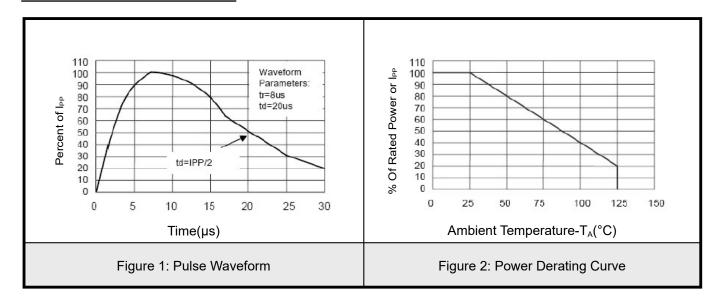
| PART   | DEVICE  | V <sub>RWM</sub> (V) | V <sub>B</sub> (V) | I <sub>⊤</sub> (mA) | V <sub>c</sub> @1A(V) | V <sub>c</sub> (V) |      | I <sub>R</sub> (μA) | C <sub>T</sub> (pF) |
|--------|---------|----------------------|--------------------|---------------------|-----------------------|--------------------|------|---------------------|---------------------|
| NUMBER | MARKING | (max.)               | (min.)             |                     | (max.)                | (max.)             | (@A) | (max.)              | (max.)              |
| SD03   | 03W     | 3.3                  | 4                  | 1                   | 6.5                   | 10.5               | 20   | 40                  | 450                 |
| SD05   | 5U      | 5                    | 6                  | 1                   | 9.8                   | 18                 | 17   | 40                  | 300                 |
| SD12   | 12W     | 12                   | 13.3               | 1                   | 19                    | 32                 | 11   | 1                   | 130                 |
| SD15   | 15W     | 15                   | 16.7               | 1                   | 24                    | 38                 | 10   | 1                   | 120                 |
| SD18   | 18W     | 18                   | 20.0               | 1                   | 29                    | 45                 | 9    | 1                   | 100                 |
| SD20   | 20W     | 20                   | 22.3               | 1                   | 35                    | 50                 | 8    | 1                   | 90                  |
| SD24   | 24W     | 24                   | 26.7               | 1                   | 43                    | 52                 | 7    | 1                   | 80                  |
| SD36   | 36W     | 36                   | 40                 | 1                   | 60                    | 75                 | 5    | 1                   | 60                  |







## 6. Typical characteristic



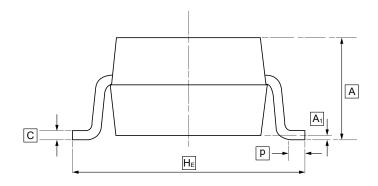


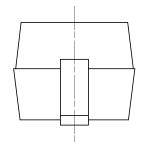


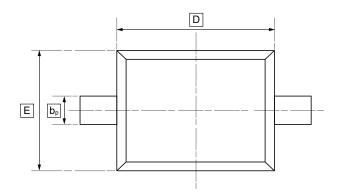




## 7.SOD-323 Package Outline Dimensions







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

| Symbol | Α    | <b>b</b> p | С    | D    | E    | HE   | <b>A</b> <sub>1</sub> | р    |
|--------|------|------------|------|------|------|------|-----------------------|------|
| Min    | 0.90 | 0.25       | 0.10 | 1.60 | 1.15 | 2.30 | 0.01                  | 0.20 |
| Max    | 1.20 | 0.40       | 0.15 | 1.80 | 1.35 | 2.80 | 0.10                  | 0.50 |

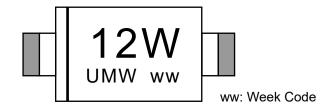








## 8. Ordering information



| Order Code | Marking | Package | Base QTY | Delivery Mode |
|------------|---------|---------|----------|---------------|
| UMW SD03   | 03W     | SOD-323 | 3000     | Tape and reel |
| UMW SD05   | 05W     | SOD-323 | 3000     | Tape and reel |
| UMW SD12   | 12W     | SOD-323 | 3000     | Tape and reel |
| UMW SD15   | 15W     | SOD-323 | 3000     | Tape and reel |
| UMW SD18   | 18W     | SOD-323 | 3000     | Tape and reel |
| UMW SD20   | 20W     | SOD-323 | 3000     | Tape and reel |
| UMW SD24   | 24W     | SOD-323 | 3000     | Tape and reel |
| UMW SD36   | 36W     | SOD-323 | 3000     | Tape and reel |

**UMW SDxx** 







#### 9.Disclaimer

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