

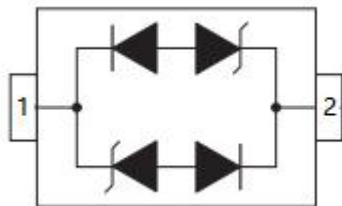
SD03LCC THRU SD24LCC TVS ARRAY



Features

- Protects 3.3, 5, 8, 12, 15, 18, 24V Components
- 350 Watts Peak Pulse Power per Line (tp = 8/20µs)
- Bidirectional Configurations
- Replacement for MLV (0805)
- Protects One Power or I/O Port
- Low Clamping Voltage
- Terminals finish: 100% Pure Tin
- “-A” is an AEC-Q101 qualified device
- This is a Pb-free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Schematic & Pin Configuration



Application

- Ethernet - 10/100/1000 Base T
- Cellular Phones
- Handheld - Wireless Systems
- Personal Digital Assistant (PDA)
- USB Interface
- Pagers peripherals

Maximum Ratings@T_A=25° C unless otherwise specified

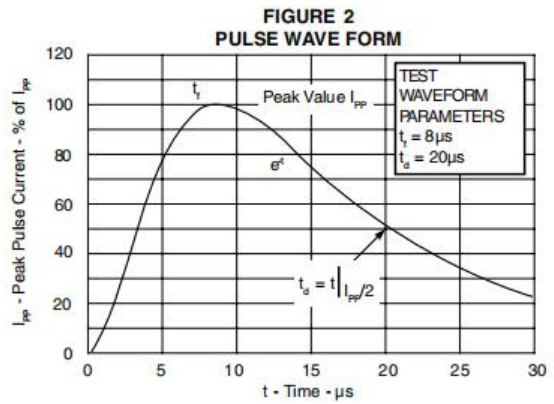
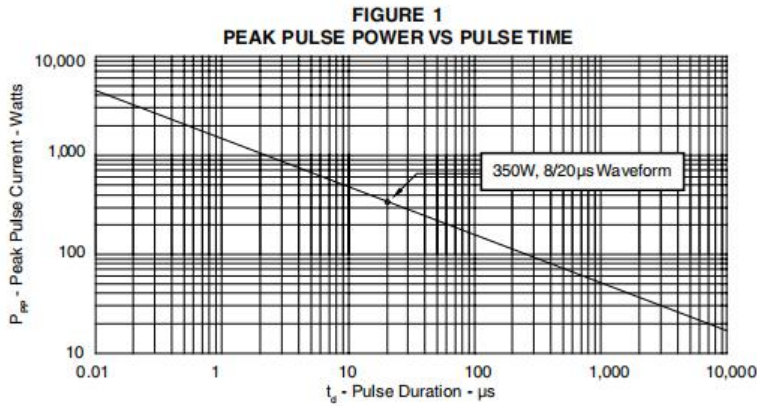
| Parameter | Symbol | Value | Units |
|--------------------------------|------------------|------------|-------|
| Peak Pulse Power (tp=8/20 µ s) | P _{pp} | 350 | W |
| Operating Temperature | T _J | -55 to 150 | ° C |
| Storage Temperature | T _{STG} | -55 to 150 | ° C |

Electrical Characteristics@T_A=25°C unless otherwise specified

| Part Name | Marking Code | Stand-off Voltage V _{WM} (v) Max | Breakdown Voltage V _{BR} @1mA (V) Min | Clamping Voltage V _C @ 1 A (V) Max | Clamping Voltage V _C @ I _{PP} (V) Max | Peak Pulse Current (tp=8/20us) I _{PP} (A) | Leakage Current I _r @V _{WM} (uA) Max | Capacitance (f=1MHz) @0V (pF) Max |
|-----------|--------------|---|--|---|---|--|--|-----------------------------------|
| SD03LCC | 03LCC | 3.3 | 4 | 7 | 19 | 20 | 5 | 8 |
| SD05LCC | 05LCC | 5 | 6 | 9.8 | 18.3 | 17 | 5 | 8 |
| SD08LCC | 08LCC | 8 | 8.5 | 13.4 | 18.5 | 17 | 2 | 8 |
| SD12LCC | 12LCC | 12 | 13.3 | 19 | 28.6 | 11 | 1 | 8 |
| SD15LCC | 15LCC | 15 | 16.7 | 24 | 31.8 | 10 | 1 | 8 |
| SD18LCC | 18LCC | 18 | 20 | 29 | 45 | 8 | 1 | 8 |
| SD24LCC | 24LCC | 24 | 26 | 43 | 56 | 6 | 1 | 8 |

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - sales@smc-diodes.com •

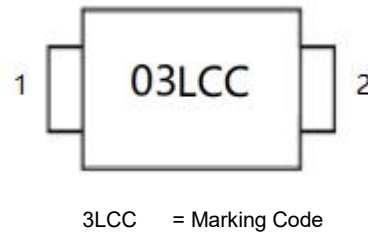
Ratings and Characteristics Curves



Ordering Information

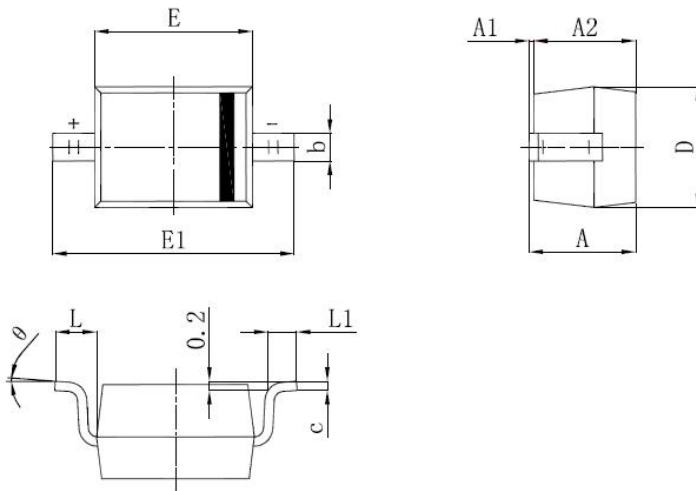
| Device | Package | Shipping |
|--------------------------------|----------------------|----------------|
| SD03LCC THRU SD24LCC | SOD-323 (Pb-Free) | 3000pcs / reel |
| SD03LCCTR THRU SD24LCCTR | SOD-323 (Pb-Free) | 3000pcs / reel |

Marking Diagram



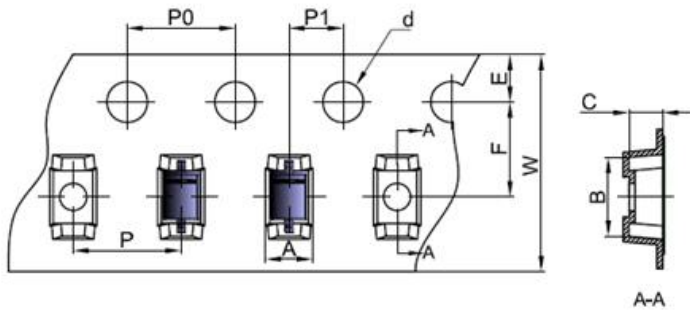
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Mechanical Dimensions SOD-323



| SYMBOL | Millimeters | | Inches | |
|--------|-------------|-------|------------|-------|
| | MIN. | MAX. | MIN. | MAX. |
| A | - | 1.000 | - | 0.039 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.800 | 0.900 | 0.031 | 0.035 |
| b | 0.250 | 0.350 | 0.010 | 0.014 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 1.200 | 1.400 | 0.047 | 0.055 |
| E | 1.600 | 1.800 | 0.063 | 0.071 |
| E1 | 2.500 | 2.700 | 0.098 | 0.106 |
| L | 0.475 REF. | | 0.019 REF. | |
| L1 | 0.250 | 0.400 | 0.010 | 0.016 |
| θ | 0° | 8° | 0° | 8° |

Carrier Tape Specification SOD-323



| SYMBOL | Millimeters | |
|--------|-------------|------|
| | Min. | Max. |
| B | 2.85 | 2.95 |
| C | 1.20 | 1.30 |
| d | 1.40 | 1.60 |
| E | 1.65 | 1.85 |
| F | 3.40 | 3.60 |
| P | 3.90 | 4.10 |
| P0 | 3.90 | 4.10 |
| P1 | 1.90 | 2.10 |
| W | 7.90 | 8.30 |

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