

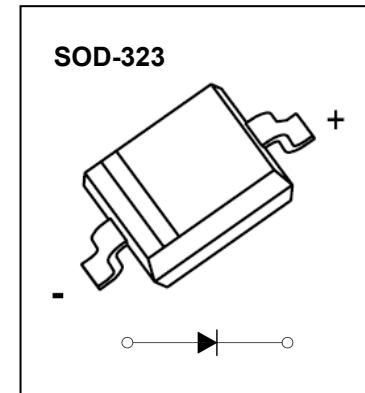


SOD-323 Plastic-Encapsulate Diodes

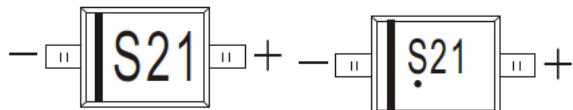
SD106WS SCHOTTKY BARRIER DIODE

FEATURES

- Low turn-on voltage
- Fast switching
- Microminiature plastic package
- This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge
- Ideal for protection of MOS devices, steering, biasing, and coupling diodes for fast switching and low logic level applications



MARKING: S21



The marking bar indicates the cathode
Solid dot = Green molding compound device, if none,
the normal device.

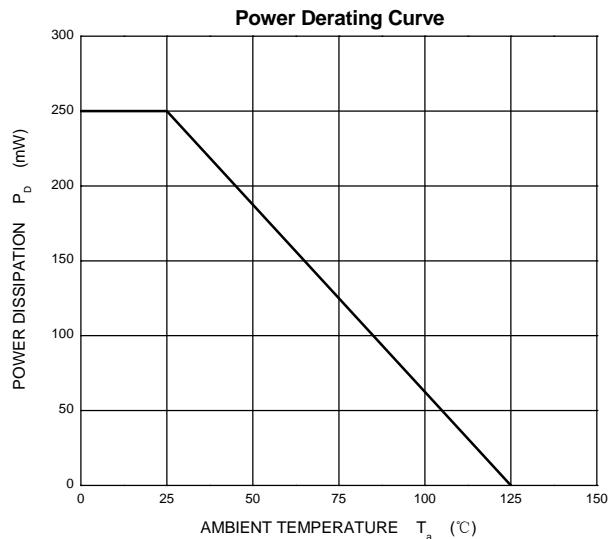
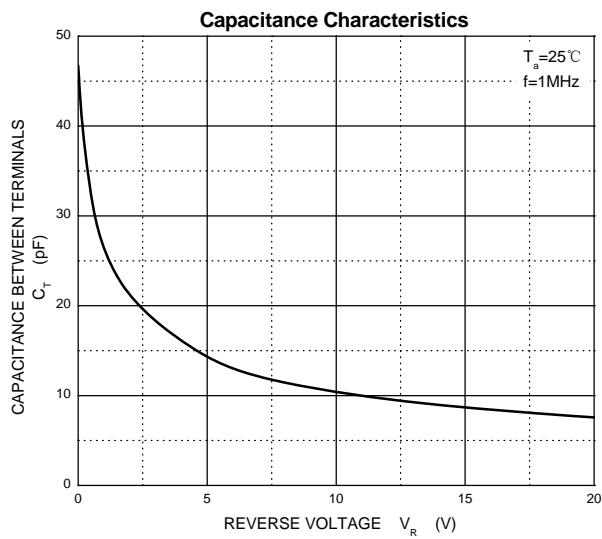
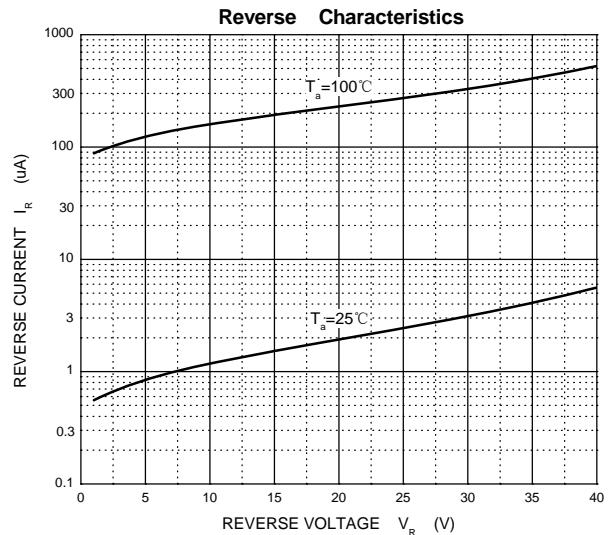
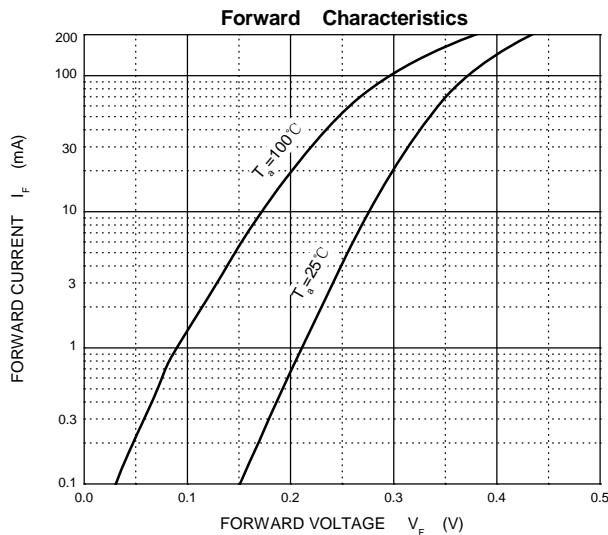
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

| Parameter | Symbol | Limit | | | Unit |
|---|------------------|----------|--|--|------|
| Non-repetitive peak reverse voltage | V _{RM} | 30 | | | V |
| Forward current | I _{FM} | 200 | | | mA |
| Non-repetitive Forward Surge Current @t=8.3ms | I _{FSM} | 1 | | | A |
| Power dissipation | P _{tot} | 250 | | | mW |
| Thermal resistance junction to ambient | R _{eJA} | 400 | | | °C/W |
| Junction temperature | T _J | 125 | | | °C |
| Storage temperature | T _{STG} | -55~+150 | | | °C |

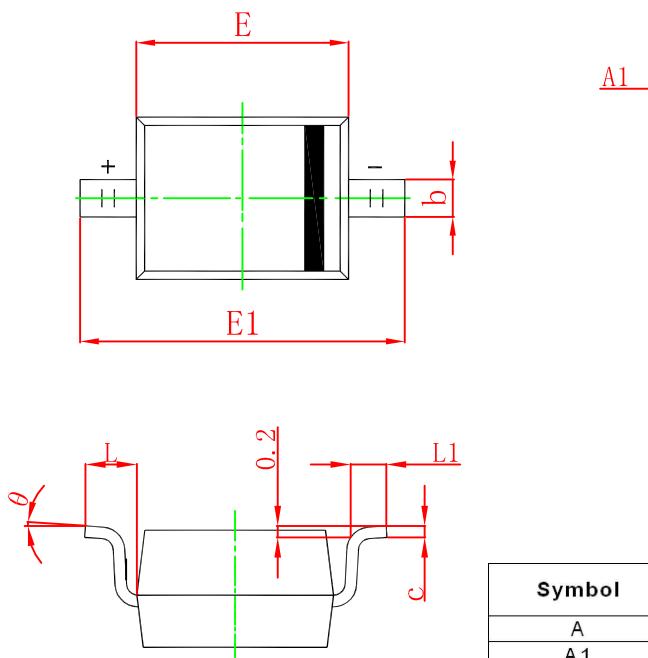
Electrical Ratings @Ta=25°C

| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|-------------------------------|----------------|-----|--------------------------|-----|------|---|
| Reverse breakdown voltage | V _R | 30 | | | V | IR=100uA |
| Forward voltage | V _F | | 260 320 420 490 | 550 | mV | I _F =2mA I _F =15mA I _F =100mA I _F =200mA |
| Reverse current | I _R | | | 5 | μA | V _R =30V |
| Capacitance between terminals | C _T | | | 15 | pF | V _R =10V,f=1MHz |

Typical Characteristics

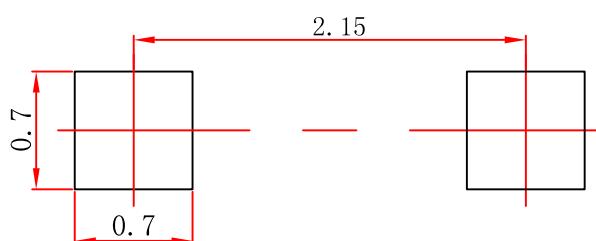


SOD-323 Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In 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 | 2.550 | 2.750 | 0.100 | 0.108 |
| L | 0.475 REF. | | 0.019 REF. | |
| L1 | 0.250 | 0.400 | 0.010 | 0.016 |
| θ | 0° | 8° | 0° | 8° |

SOD-323 Suggested Pad Layout



Note:

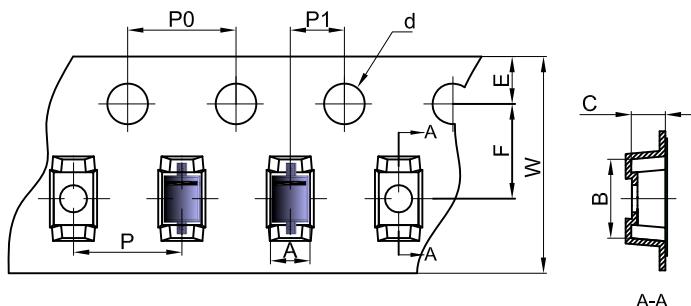
1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

NOTICE

JCET reserve the right to make modifications,enhancements, improvements, corrections or other changes without further notice to any product herein.JCET does not assume any liability arising out of the application or use of any product described herein.

SOD-323 Tape and Reel

SOD-323 Embossed Carrier Tape

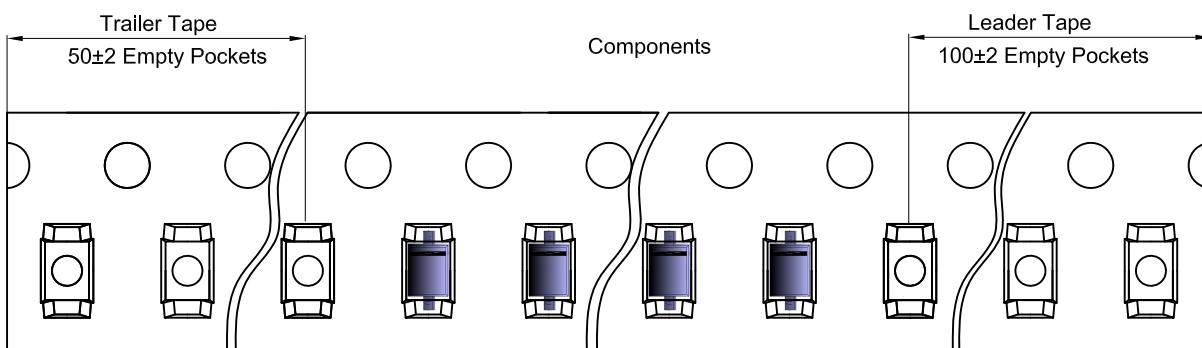


Packaging Description:

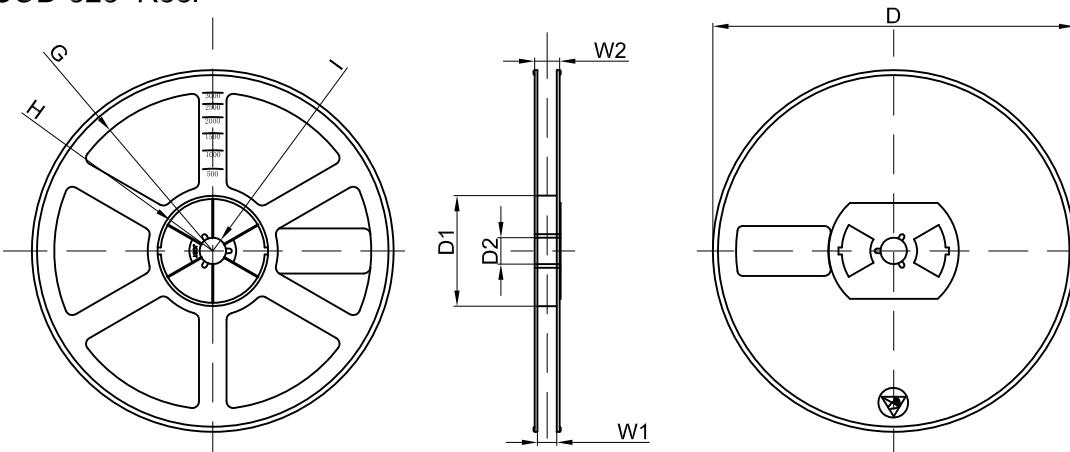
SOD-323 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

| Dimensions are in millimeter | | | | | | | | | | |
|------------------------------|------|-----|------|-------|------|------|------|------|------|------|
| Pkg type | A | B | C | d | E | F | P0 | P | P1 | W |
| SOD-323 | 1.48 | 3.3 | 1.25 | Ø1.50 | 1.75 | 3.50 | 4.00 | 4.00 | 2.00 | 8.00 |

SOD-323 Tape Leader and Trailer



SOD-323 Reel



| Dimensions are in millimeter | | | | | | | | |
|------------------------------|---------|-------|-------|--------|--------|-------|------|-------|
| Reel Option | D | D1 | D2 | G | H | I | W1 | W2 |
| 7"Dia | Ø178.00 | 54.40 | 13.00 | R78.00 | R25.60 | R6.50 | 9.50 | 12.30 |

| REEL | Reel Size | Box | Box Size(mm) | Carton | Carton Size(mm) | G.W.(kg) |
|----------|-----------|------------|--------------|-------------|-----------------|----------|
| 3000 pcs | 7 inch | 45,000 pcs | 203×203×195 | 180,000 pcs | 438×438×220 | |