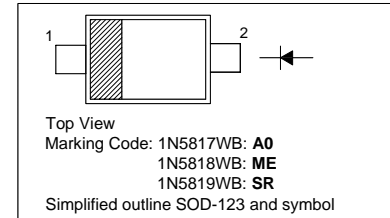


1N5817WB-1N5819WB

1 A SURFACE MOUNT SCHOTTKY BARRIER DIODE

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |

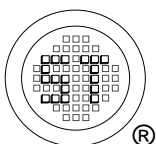


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

| Parameter | Symbol | Value | Unit |
|--|-----------|---------------|------------------|
| Reverse Voltage | V_R | 1N5817WB | 20 |
| | | 1N5818WB | 30 |
| | | 1N5819WB | 40 |
| Average Forward Rectified Current | I_O | 1 | A |
| Non-Repetitive Peak Forward Surge Current (8.3 ms Single Half Sine-Wave) | I_{FSM} | 25 | A |
| Power Dissipation | P_{tot} | 450 | mW |
| Operating Temperature Range | T_j | - 55 to + 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_S | - 55 to + 150 | $^\circ\text{C}$ |

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

| Parameter | Symbol | Min. | Max. | Unit |
|---|----------|----------|------|-------|
| Reverse Breakdown Voltage at $I_R = 1\text{ mA}$ | V_{BR} | 1N5817WB | 20 | - |
| | | 1N5818WB | 30 | - |
| | | 1N5819WB | 40 | - |
| Reverse Voltage Leakage Current at $V_R = 20\text{ V}$ at $V_R = 30\text{ V}$ at $V_R = 40\text{ V}$ at $V_R = 4\text{ V}$ at $V_R = 6\text{ V}$ | I_R | 1N5817WB | - | 1 |
| | | 1N5818WB | - | 1 |
| | | 1N5819WB | - | 1 |
| | | 1N5819WB | - | 0.05 |
| | | 1N5819WB | - | 0.075 |
| Forward Voltage at $I_F = 0.1\text{ A}$ at $I_F = 1\text{ A}$ at $I_F = 3\text{ A}$ | V_F | 1N5819WB | - | 0.45 |
| | | 1N5817WB | - | 0.45 |
| | | 1N5818WB | - | 0.55 |
| | | 1N5819WB | - | 0.6 |
| | | 1N5817WB | - | 0.75 |
| | | 1N5818WB | - | 0.875 |
| 1N5819WB | - | 0.9 | | |
| Diode Capacitance at $V_R = 4\text{ V}$, $f = 1\text{ MHz}$ | C_D | - | 120 | pF |



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 71116



ISO 9001:2000
Certificate No. 0506098

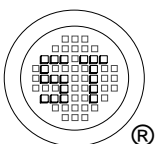
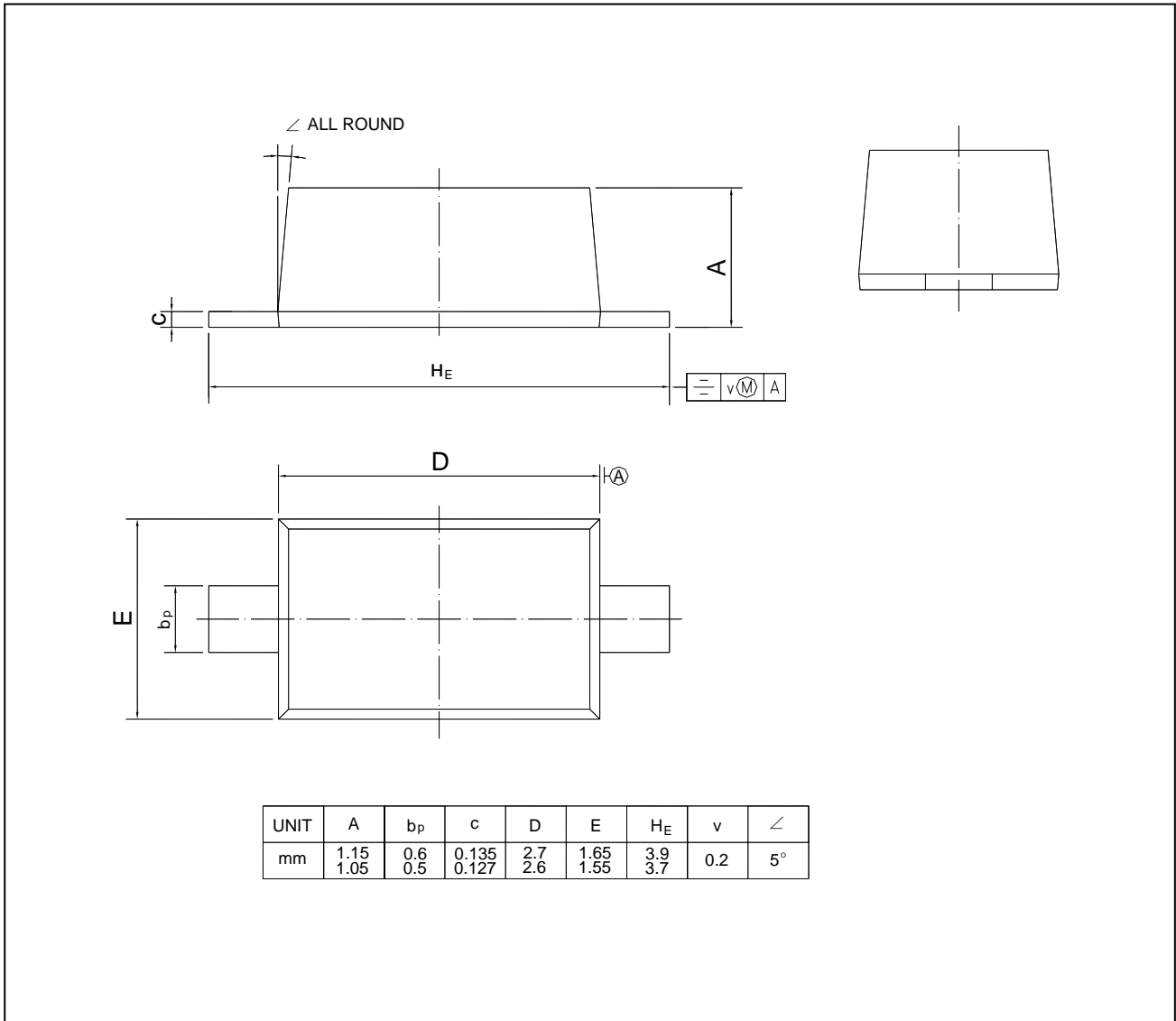
Dated : 20/12/2006

1N5817WB-1N5819WB

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



SEMTECH ELECTRONICS LTD.
 (Subsidiary of Sino-Tech International Holdings Limited, a company
 listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
 Certificate No. 05103



ISO 14001:2004
 Certificate No. 7116



ISO 9001:2000
 Certificate No. 0506098

Dated : 20/12/2006