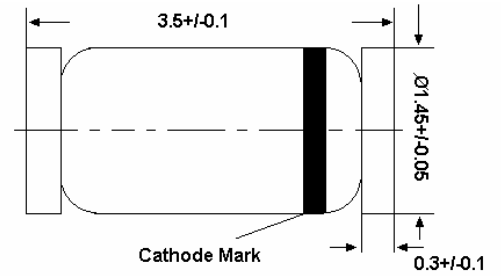


## SCHOTTKY BARRIER DIODE

Ultra High-Speed Switching, Voltage Clamping  
Protection Circuits and Blocking Applications

### Features

- Low forward voltage.
- Guard ring protected.
- Hermetically-sealed leaded glass package.



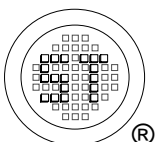
Glass case MiniMELF  
Dimensions in mm

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

| Parameter                                   | Symbol      | Limits      | Unit             |
|---|-------------|-------------|------------------|
| Continuous reverse voltage                  | $V_R$       | 30          | V                |
| Continuous forward current                  | $I_F$       | 200         | mA               |
| Average forward current                     | $I_{F(AV)}$ | 200         | mA               |
| Repetitive peak forward current             | $I_{FRM}$   | 300         | mA               |
| Non-repetitive peak forward current         | $I_{FSM}$   | 5           | A                |
| Operating ambient temperature               | $T_{amb}$   | -65 to +125 | $^\circ\text{C}$ |
| Junction temperature                        | $T_j$       | 125         | $^\circ\text{C}$ |
| Storage temperature range                   | $T_S$       | -65 to +150 | $^\circ\text{C}$ |
| Thermal resistance from junction to ambient | $R_{thja}$  | 320         | K/W              |

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

| Parameter  | Symbol   | Min. | Typ. | Max. | Unit          |
|--|----------|------|------|------|---------------|
| Forward voltage  |          |      |      |      |               |
| at $I_F = 0.1\text{mA}$  | $V_F$    | -    | -    | 240  | mV            |
| at $I_F = 1\text{mA}$  | $V_F$    | -    | -    | 320  | mV            |
| at $I_F = 10\text{mA}$   | $V_F$    | -    | -    | 400  | mV            |
| at $I_F = 30\text{mA}$   | $V_F$    | -    | -    | 500  | mV            |
| at $I_F = 100\text{mA}$  | $V_F$    | -    | -    | 800  | mV            |
| Reverse current  |          |      |      |      |               |
| at $V_R = 25\text{V}$  | $I_R$    | -    | -    | 2.3  | $\mu\text{A}$ |
| Reverse recovery time  |          |      |      |      |               |
| at $I_F = 10\text{mA}$ , $I_R = 10\text{mA}$ , $R_L = 100\Omega$ | $t_{rr}$ | -    | -    | 4    | ns            |



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Sino-Tech International Holdings Limited, a company  
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ISO/TS 16949 : 2002  
Certificate No. 05103

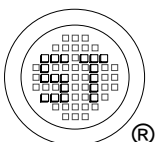
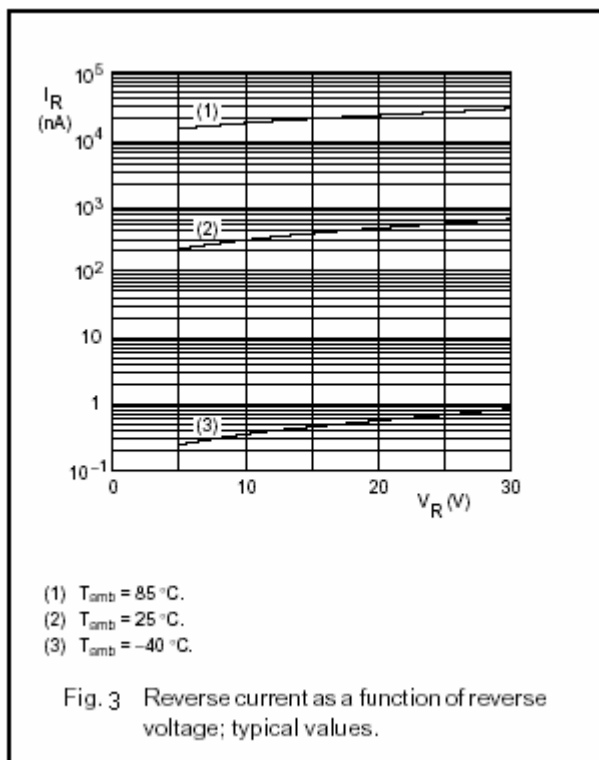
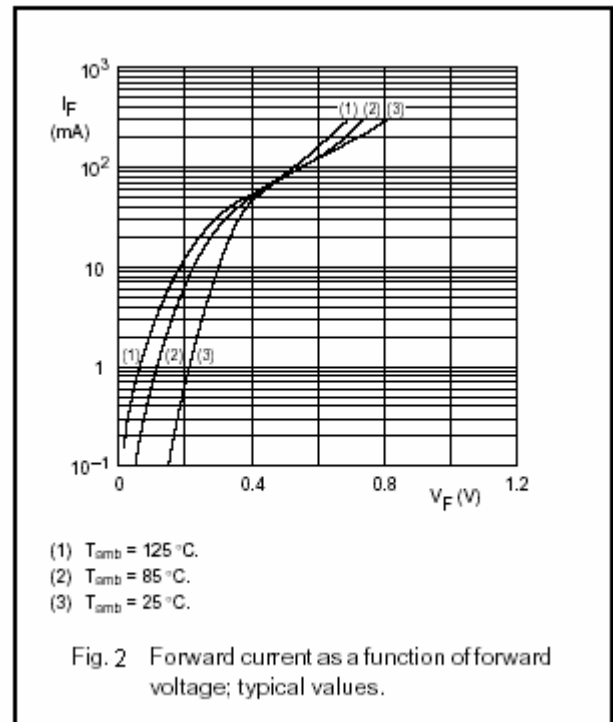
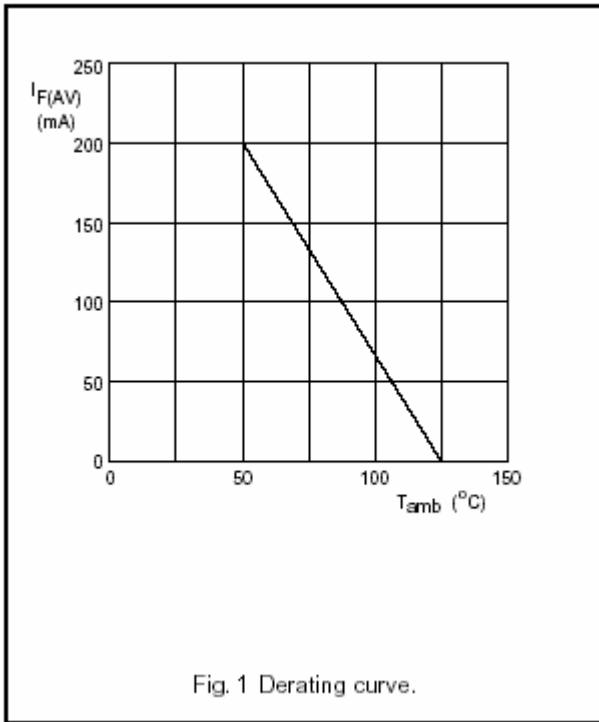


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ISO 14001:2004  
Certificate No. 71116



ISO 9001:2000  
Certificate No. 0506098

Dated : 02/08/2005