

# MCL914, MCL914A, MCL914B

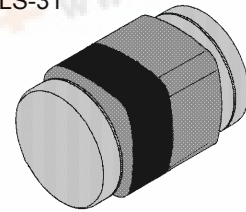
查询"MCL914B"供应商

## Silicon Epitaxial Planar Switching Diode

### Features

- Saving space
- Hermetic sealed parts
- Fits onto SOD-323 / SOT-23 footprints

LS-31



Glass Case MicroMELF

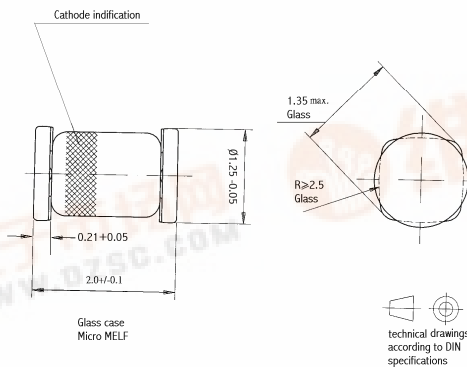
### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

| Parameter                                 | Symbol         | Value                                     | Unit             |
|---|----------------|---|------------------|
| Non-Repetitive Peak Reverse Voltage       | $V_{RM}$       | 100                                       | V                |
| Reverse Voltage                           | $V_R$          | 75  | V                |
| Average Rectified Forward Current         | $I_{F(AV)}$    | 75<br>200                                 | mA               |
| Forward Continuous Current                | $I_{FM}$       | 150<br>300                                | mA               |
| Non-Repetitive Peak Forward Surge Current | $I_{FSM}$      | 1<br>1<br>4                               | A                |
|   |                | at $t = 1\text{ s}$                       |                  |
|   |                | MCL914 at $t = 1\text{ }\mu\text{s}$      |                  |
|   |                | MCL914A / B at $t = 1\text{ }\mu\text{s}$ |                  |
| Power Dissipation                         | $P_{tot}$      | 500                                       | mW               |
| Operating and Storage Temperature Range   | $T_j, T_{stg}$ | - 65 to + 175                             | $^\circ\text{C}$ |

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

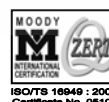
| Parameter   | Symbol   | Min. | Max.                | Unit                                 |
|---|----------|------|---------------------|--------------------------------------|
| Forward Voltage   | $V_F$    | -    | 0.62<br>1<br>1<br>1 | V                                    |
| at $I_F = 5\text{ mA}$  |          |      |                     |                                      |
| at $I_F = 100\text{ mA}$  |          |      |                     |                                      |
| at $I_F = 10\text{ mA}$   |          |      |                     |                                      |
| at $I_F = 20\text{ mA}$   | MCL914A  | -    | 1                   |                                      |
| Reverse Current   | $I_R$    | -    | 25<br>5<br>50       | nA<br>$\mu\text{A}$<br>$\mu\text{A}$ |
| at $V_R = 20\text{ V}$  |          |      |                     |                                      |
| at $V_R = 75\text{ V}$  |          |      |                     |                                      |
| at $V_R = 20\text{ V}, T_j = 150\text{ }^\circ\text{C}$                                   |          |      |                     |                                      |
| Diode Capacitance   | $C_j$    | -    | 4                   | pF                                   |
| at $V_R = 0, f = 1\text{ MHz}$  |          |      |                     |                                      |
| Reverse Recovery Time   | $t_{rr}$ | -    | 4                   | ns                                   |
| at $I_F = 10\text{ mA}$ to $I_R = 1\text{ mA}, V_R = 6\text{ V}, R_L = 100\text{ }\Omega$ |          |      |                     |                                      |

Dimensions in mm



## SEMTECH ELECTRONICS LTD.

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



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