# multicomp PRO







Features:

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Reverse Capacitance

# **Applications:**

Schottky barrier switching

# Maximum Rating @ T<sub>A</sub> = 25°C unless otherwise specified

| Parameter  | Symbol   | SD103CW-13-F | Unit |
|--|--|--------------|------|
| Peak repetitive peak reverse voltage<br>Working peak<br>DC reverse voltage | V <sub>RRM</sub><br>V <sub>RWM</sub><br>V <sub>R</sub> | 20           | V    |
| RMS reverse voltage  | V <sub>R(RMS)</sub>                                    | 14           | V    |
| Forward continuous current   | ۱ <sub>F</sub>   | 350          | mA   |
| Repetitive peak forward current @ t < 1s                                   | I <sub>FRM</sub>                                       | 1.5          | A    |
| Power dissipation  | P <sub>D</sub>   | 400          | mW   |
| Thermal resistance junction to ambient                                     | R <sub>θjA</sub>                                       | 300          | °C/W |
| Storage temperature  | T <sub>stg</sub>                                       | -65 to +125  | °C   |

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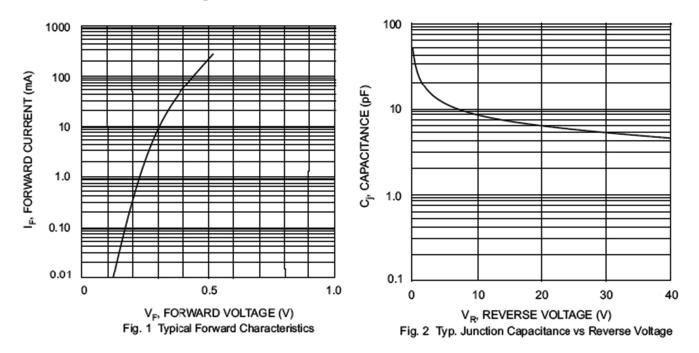




| Parameter                     | Symbol             | Min. | Тур. | Max.         | Unit | Conditions   |
|-------------------------------|--------------------|------|------|--------------|------|--|
| Reverse breakdown voltage     | V <sub>(BR)R</sub> | 20   |      |              | V    | I <sub>R</sub> = 10μΑ  |
| Forward voltage               | V <sub>F</sub>     |      |      | 0.37<br>0.60 | V    | I <sub>F</sub> = 20mA<br>I <sub>F</sub> = 200mA  |
| Reverse current               | I <sub>RM</sub>    |      |      | 5            | μA   | V <sub>R</sub> = 10V   |
| Capacitance between terminals | C <sub>T</sub>     |      | 50   |              | pF   | V <sub>R</sub> = 0, f = 1MHz   |
| Reverse recovery time         | t <sub>rr</sub>    |      | 10   |              | ns   | I <sub>R</sub> = I <sub>F</sub> = 200mA<br>I <sub>rr</sub> = 0.1* I <sub>R</sub> , R <sub>L</sub> = 100Ω |

### Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

#### Typical Characteristics @ TA = 25°C unless otherwise specified

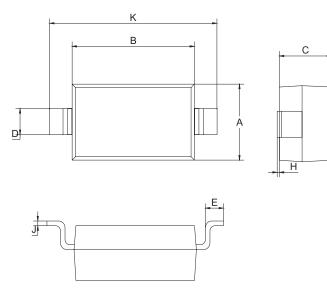


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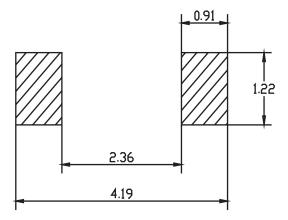
## Package Outline

Plastic surface mounted package



| SOD-123              |              |      |  |  |
|----------------------|--------------|------|--|--|
| Dim                  | Min          | Max  |  |  |
| А                    | 1.4          | 1.8  |  |  |
| В                    | 2.55         | 2.85 |  |  |
| С                    | 1.15 Typical |      |  |  |
| D                    | 0.5          | 0.6  |  |  |
| Е                    | 0.3          | 0.4  |  |  |
| Н                    | 0.02         | 0.10 |  |  |
| J                    | 0.1 Typical  |      |  |  |
| K                    | 3.55         | 3.85 |  |  |
| All Dimensions in mm |              |      |  |  |

## **Soldering Footprint**



**Dimensions : Millimetres** 

## Package Information

| Device       | Package | Shipping          |
|--------------|---------|-------------------|
| SD103CW-13-F | SOD-123 | 3,000/Tape & Reel |

## **Part Number Table**

| Description            | Part Number  |  |
|------------------------|--------------|--|
| Schottky Barrier Diode | SD103CW-13-F |  |

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