

## Schottky Barrier Rectifiers

### Features

- For use in low voltage,high frequency inverters
- Free wheeling,and polarity protection applications

### Mechanical Data

- Case:Molded plastic body
- Terminals:Plated leads solderable per MIL-STD-750, Method 2026
- Polarity:Polarity symbols marked on case
- Marking:L4F



cathode 1  2 Anode

### Maximum Ratings And Electrical Characteristics,Single Diode@T<sub>a</sub>=25°C

| Parameter                              | Symbol           | Value    | Units |
|----------------------------------------|------------------|----------|-------|
| Peak Repetitive Peak Reverse Voltage   | V <sub>RRM</sub> | 40       | V     |
| Working Peak Reverse Voltage           | V <sub>RWM</sub> |          |       |
| DC Reverse Voltage                     | V <sub>R</sub>   |          |       |
| RMS Reverse Voltage                    | V <sub>RMS</sub> | 28       | V     |
| Average Rectified Output Current       | I <sub>O</sub>   | 1        | A     |
| Peak Forward Surge Current@8.3 ms      | I <sub>FSM</sub> | 25       | A     |
| Repetitive Peak Forward Current        | I <sub>FRM</sub> | 625      | mA    |
| Power Dissipation                      | P <sub>D</sub>   | 250      | mW    |
| Thermal Resistance Junction to Ambient | R <sub>θJA</sub> | 500      | °C/W  |
| Storage Temperature Range              | T <sub>STG</sub> | -65~+150 | °C    |
| Non-Repetitive Peak Reverse Voltage    | V <sub>RM</sub>  | 20       | V     |

### Electrical Characteristics(T<sub>a</sub>=25°C unless otherwise specified)

| Parameter                       | Symbol            | Test Condition            | Min | Max | Unit |
|---------------------------------|-------------------|---------------------------|-----|-----|------|
| Reverse Breakdown Voltage       | V <sub>(BR)</sub> | I <sub>R</sub> =1mA       | 40  |     | V    |
| Reverse Voltage Leakage Current | I <sub>R</sub>    | V <sub>R</sub> =40V       |     | 1   | mA   |
| Forward Voltage                 | V <sub>F</sub>    | I <sub>F</sub> =1A        |     | 0.6 | V    |
| Diode Capacitance               | C <sub>D</sub>    | V <sub>R</sub> =4V,f=1MHz |     | 120 | pF   |

## Typical Characteristic

FIG. 1- FORWARD CURRENT DERATING CURVE

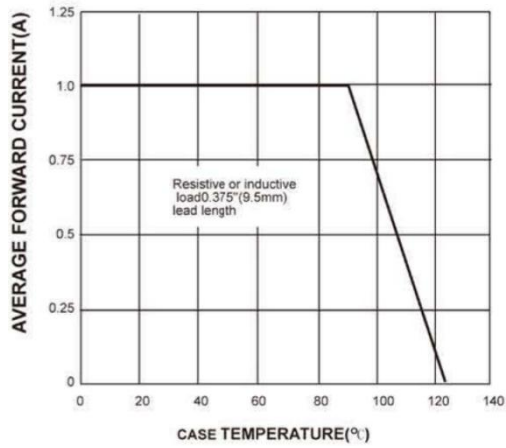


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

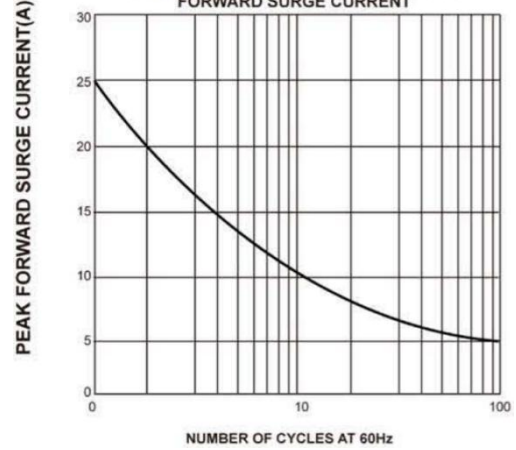


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

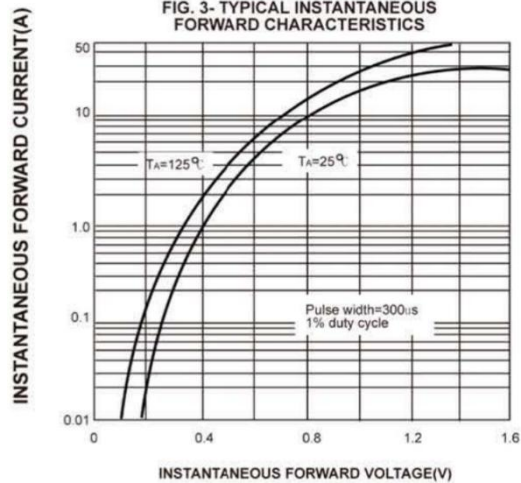


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

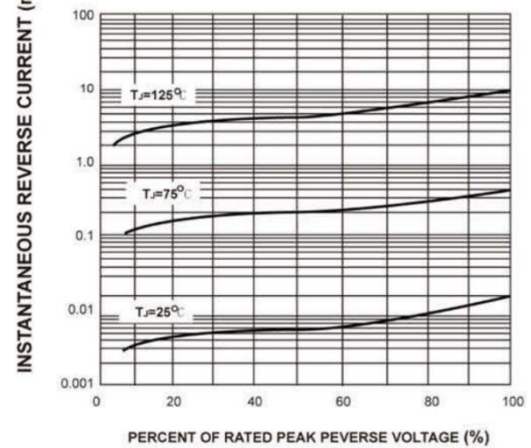


FIG. 5- TYPICAL JUNCTION CAPACITANCE

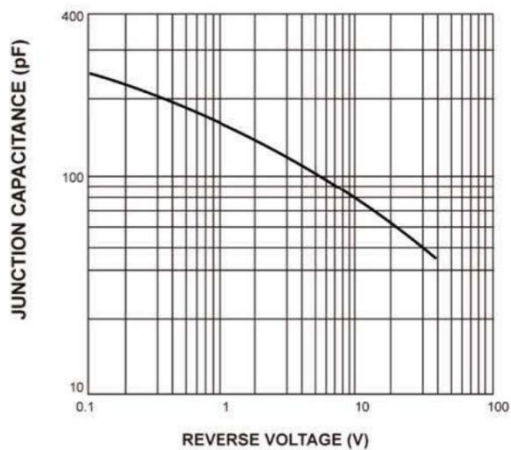
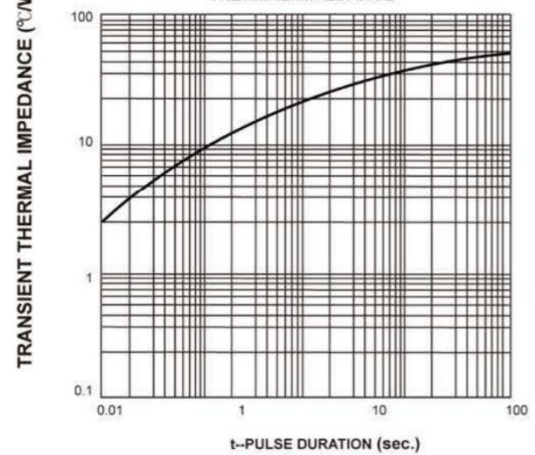


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



## Package Information

### SOD-123

### Dimensions in mm

