

### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### **VOLTAGE 60 Volts CURRENT 3.0 Amperes**

### **FEATURES**

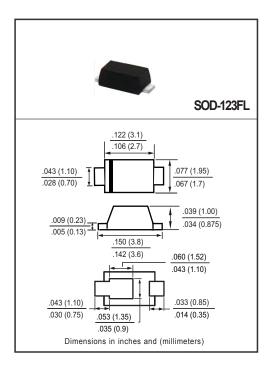
- \* Low power loss, high efficiency
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability
- \* High speed switching
- \* High surge capabitity
- \* High reliability
- \* Guard ring construction on dic
- \* Anti-ESD

### MECHANICAL DATA

- \* Epoxy: Device has UL flammability classification 94V-O
- \* Mounting position: Any
- \* Weight: 0.01 gram (Approx.)
- \* Flat lead frame

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.



MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

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|---|-------------------|--------------|------------------|--|
| RATINGS   | SYMBOL            | 3SSL60L      | UNITS            |  |
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>  | 60           | Volts            |  |
| Maximum RMS Voltage   | V <sub>RMS</sub>  | 42           | Volts            |  |
| Maximum DC Blocking Voltage   | V <sub>DC</sub>   | 60           | Volts            |  |
| Maximum Average Forward Rectified Current @ T <sub>C</sub> =75 °C                                 | lo                | 3.0          | Amps             |  |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I <sub>FSM</sub>  | 80           | Amps             |  |
| Typical Current Squared Time  | I <sup>2</sup> T  | 26.56        | A <sup>2</sup> S |  |
| Typical Thermal Resistance (Note 3)   | R <sub>θ</sub> JA | 110          | °C/W             |  |
| Typical Themas recoloration (Note o)  | R <sub>θ</sub> JL | 3            | -C/W             |  |
| Operating Temperature Range   | TJ                | -55 to + 150 | °C               |  |
| Storage Temperature Range   | T <sub>STG</sub>  | -55 to + 150 | °C               |  |
| Total Capacitance (Note 1)  | C <sub>T</sub>    | 75           | pF               |  |

ELECTRICAL CHARACTERISTICS(@Ta=25 °C unless otherwise noted)

| ELECTRICAL CHARACTERIOTICS (@14-25 C             | dilicas otherwise note | ,u)    |         |       |
|--|------------------------|--------|---------|-------|
| CHARACTERISTICS                                  |                        | SYMBOL | 3SSL60L | UNITS |
| Maximum Instantaneous Forward Voltage at 3.0A DC |                        | VF     | 0.62    | Volts |
| Maximum Average Reverse Current                  | @TA = 25°C             |        | 0.1     | mAmps |
| at Rated DC Blocking Voltage                     | @Ta =150 °C            | IR     | 10      | mAmps |

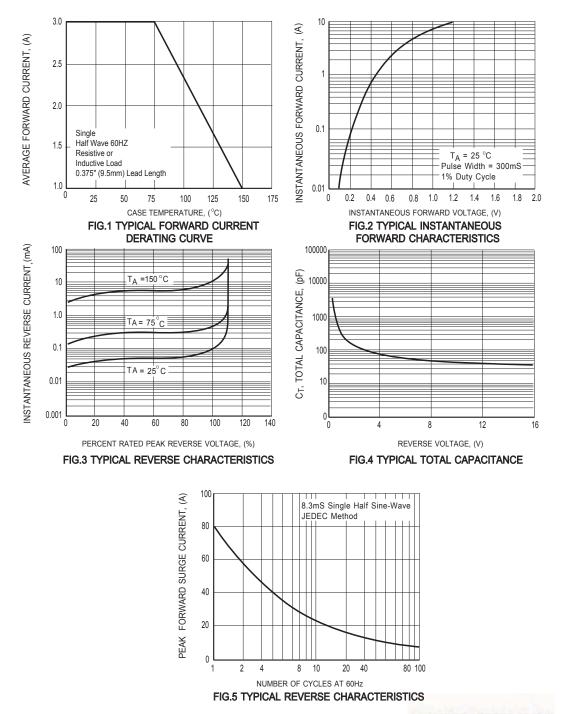
NOTES: 1. Measured at 1 MHz and applied reverse voltage of 4 Volts.

- 2. "RoHS compliant".
- 3. Thermal Resistance: Mounted on PCB.

2022-10

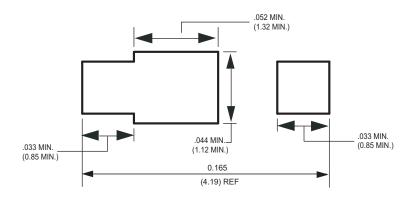
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## RATING AND CHARACTERISTICS CURVES (3SSL60L)





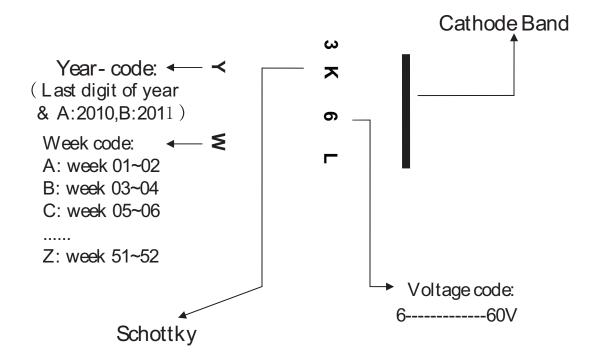
## **Mounting Pad Layout**



Dimensions in inches and (millimeters)



# Marking Description





## PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### REEL PACK

| PACKAGE                | PACKING<br>CODE | EA PER<br>REEL | EA PER<br>INNER<br>BOX | COMPONENT<br>SPACE<br>(mm) | TAPE SPACE<br>(mm) | REEL DIA<br>(mm) | CARTON SIZE<br>(mm) | EA PER<br>CARTON | GROSS<br>WEIGHT(Kg) |
|------------------------|-----------------|----------------|------------------------|----------------------------|--------------------|------------------|---------------------|------------------|---------------------|
| SOD-123F/<br>SOD-123FL | -W              | 3,000          | 15,000                 |                            |                    | 178              | 390*205*31          | 120,000          | 6.964               |



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