

### Features

- Multilayer Metal -Silicon Potential Structure
- High Current Capability, High Efficiency
- High Junction Temperature Capability
- Low Leakage Current
- Low forward voltage drop

### Applications

- Surface mount schottky barrier rectifier
- Buck and Boost dc-dc Converters
- Low Voltage High Frequency Switching Power Supply
- Low Voltage High Frequency Invers Circuit
- Low Voltage Continued Circuit and Protection Circuit



### Absolute Maximum Ratings

| Parameter                                         | Symbol        | Value       | Unit |
|---------------------------------------------------|---------------|-------------|------|
| Reverse Voltage                                   | VR, VRM, VRWM | 30          | V    |
| Maximum RMS voltage                               | VRMS          | 21          | V    |
| Forward Continuous Current                        | IFM           | 3           | A    |
| Non-Repetitive Peak Forward Surge Current@t=8.3ms | IFSM          | 50          | A    |
| Maximum instantaneous forward voltage at 3.0A     | VF            | 0.35        | V    |
| Typical Thermal Resistance per leg @TA = 25°C     | RθJA          | 75          | °C/W |
| Operating Junction Temperature Range              | TJ            | 125         | °C   |
| Storage Temperature Range                         | TSTG          | -55 to +150 | °C   |

### Electrical Characteristics (TA=25°C unless otherwise specified)

| Parameter         | Symbol | Test Condition      | Min | Typ  | Max  | Unit |
|-------------------|--------|---------------------|-----|------|------|------|
| Reverse voltage   | V(BR)  | IF=30uA             | 30  | --   | --   | V    |
| Reverse current   | IR     | VR=30V              | --  | --   | 30   | uA   |
| Forward voltage   | VF     | IF=3A               | --  | 0.35 | 0.42 | V    |
| Total Capacitance | Ctot   | VR = 0 V, f = 1 MHz | --  | 450  | --   | pF   |

### Typical Electrical Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

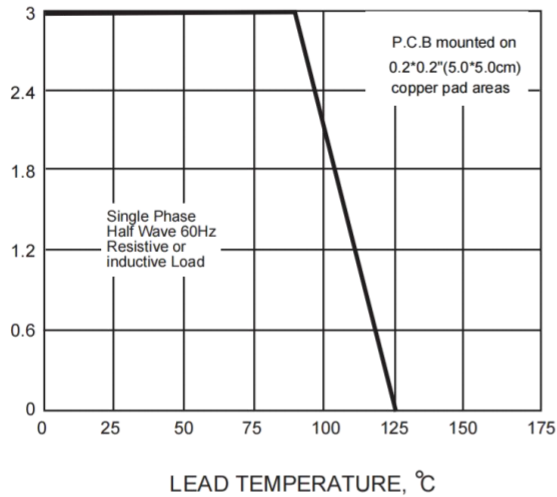


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

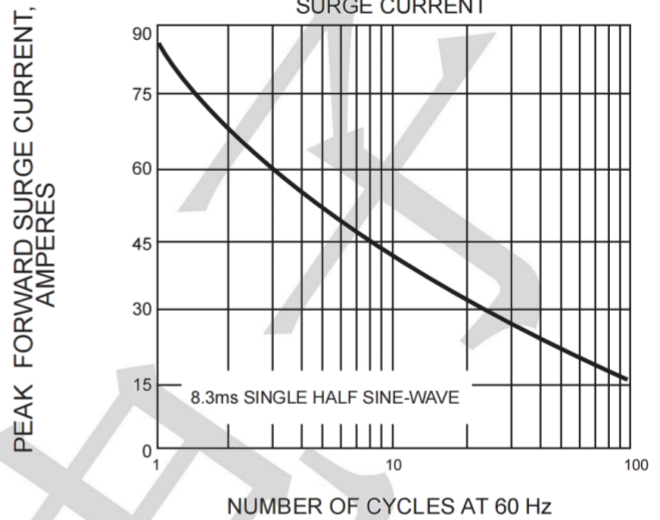


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

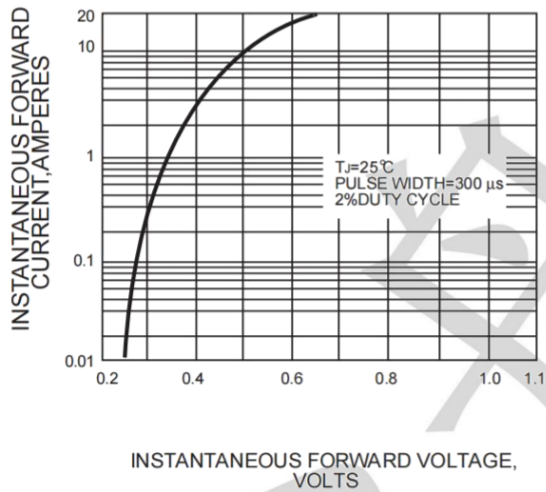


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

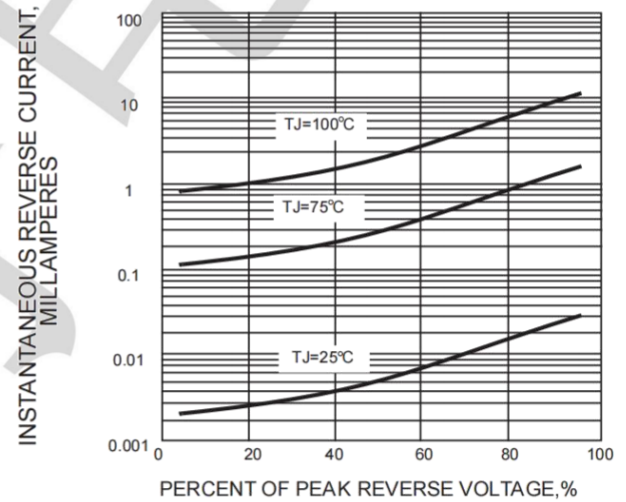


FIG. 5-TYPICAL JUNCTION CAPACITANCE

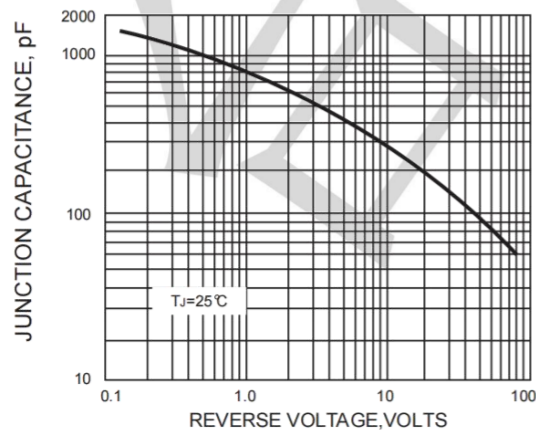
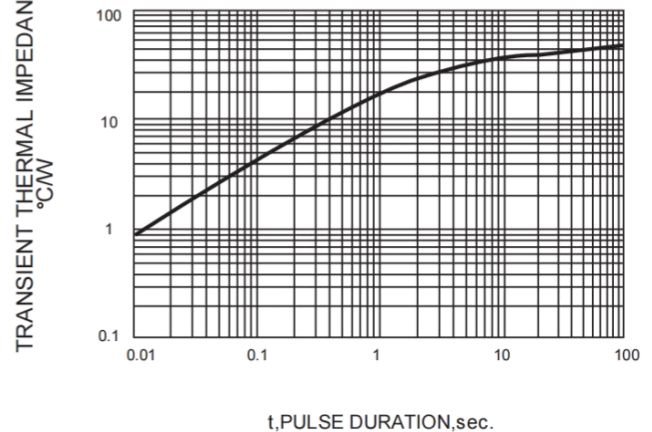
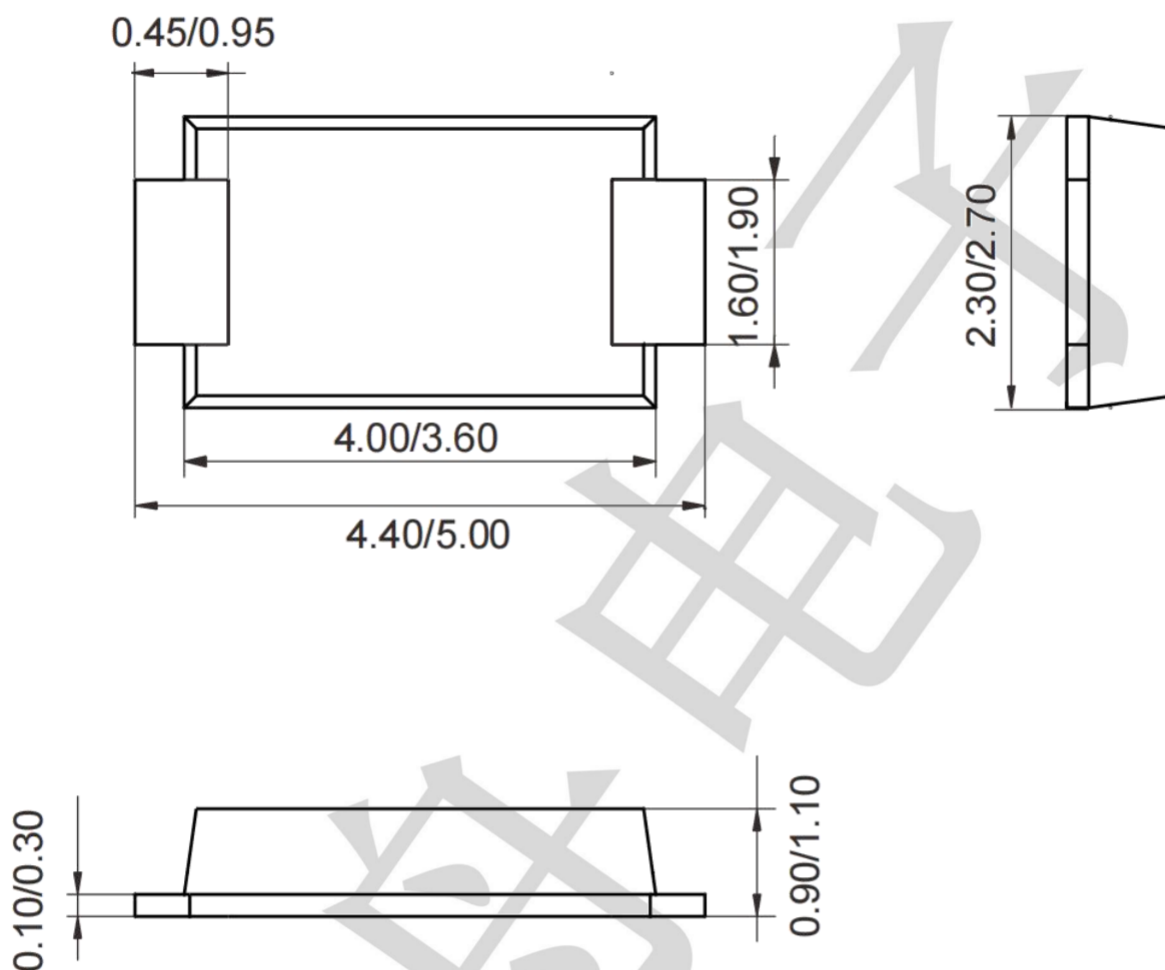


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



**Package Outline Dimensions (unit: mm)**

SOD128



**Mounting Pad Layout (unit: mm)**

