

EVVOSEMI[®]

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

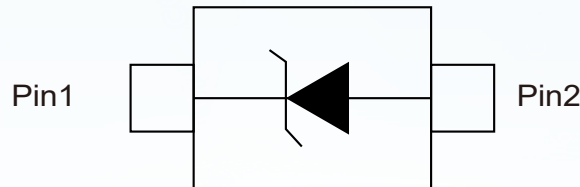
Product Specification

| | | |
|--------------|-------------|-------------------------|
| ▶ Domestic | Part Number | 1N4001(A1) - 1N4007(A7) |
| ▶ Overseas | Part Number | 1N4001(A1) - 1N4007(A7) |
| ▶ Equivalent | Part Number | 1N4001(A1) - 1N4007(A7) |

EV is the abbreviation of name EVVO

Surface Mount General Purpose Silicon Rectifiers
 Reverse Voltage - 50 to 1000 V Forward Current - 1 A

1. Pinning information



SOD-123FL

2. Maximum Ratings And Electrical Characteristics

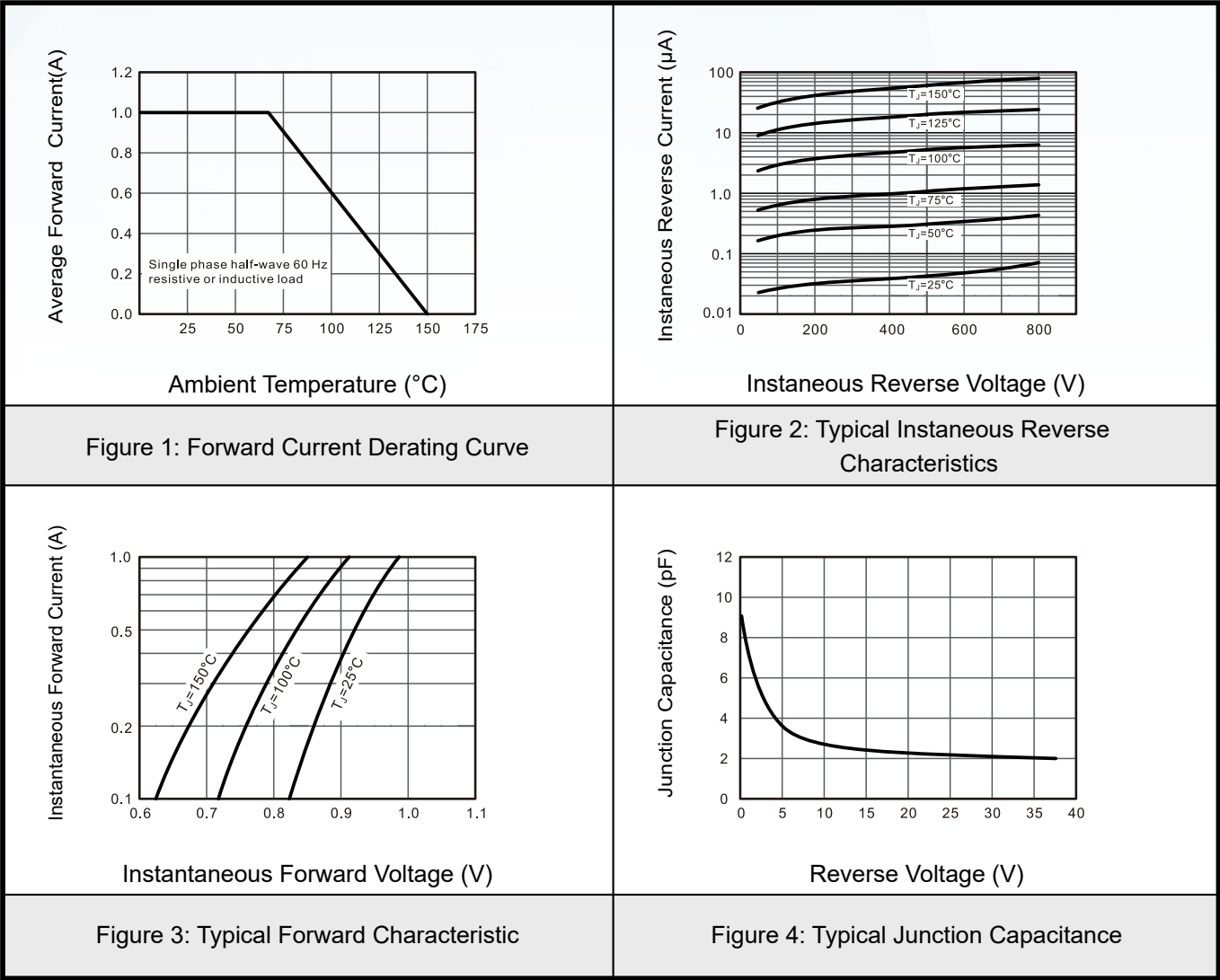
| Parameter | | Symbols | 1N 4001 | 1N 4002 | 1N 4003 | 1N 4004 | 1N 4005 | 1N 4006 | 1N 4007 | Units |
|--|-----------------------|----------------------------------|------------|------------|------------|------------|------------|------------|------------|-------|
| Maximum repetitive peak reverse voltage | | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current at T _A =65°C | | I _(AV) | 1 | | | | | | | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | | I _{FSM} | 25 | | | | | | | A |
| Maximum instantaneous forward voltage at 1.0A | | V _F | 1.1 | | | | | | | V |
| Maximum DC reverse current at rated DC blocking voltage | T _A =25°C | I _R | 5 | | | | | | | uA |
| | T _A =100°C | | 100 | | | | | | | |
| Typical junction capacitance (NOTE 1) | | C _J | 4 | | | | | | | pF |
| Typical thermal resistance (NOTE 2) | | R _{θJA} | 180 | | | | | | | °C/W |
| Junction and storage temperature range | | T _J ,T _{STG} | -55 to 150 | | | | | | | °C |

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

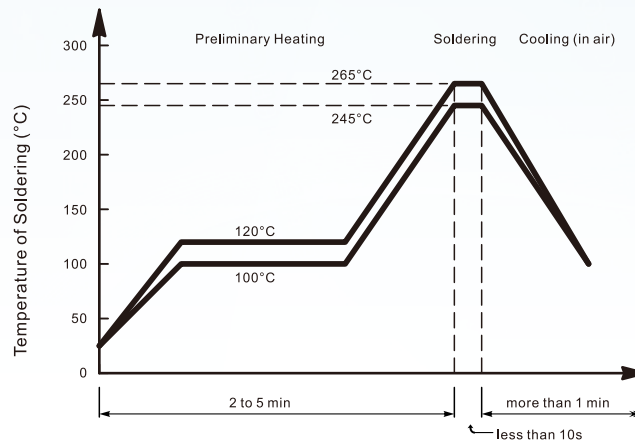
Notes:

1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, P.C.B. mounted.

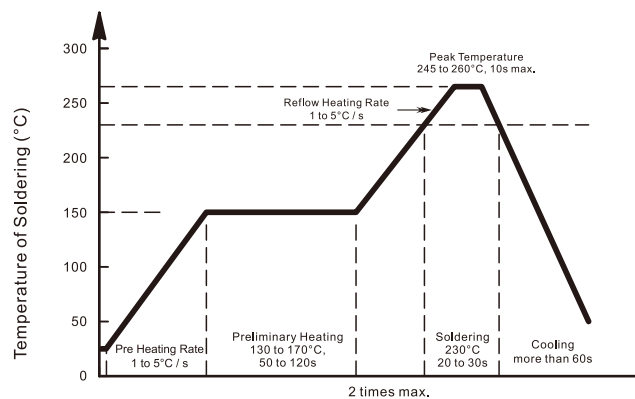
3. Typical characteristic



4. Recommended condition of flow soldering



5. Recommended condition of reflow soldering



Recommended peak temperature is over 245 °C. If peak temperature is below 245 °C, you may adjust the following parameters; time length of peak temperature (longer), time length of soldering (longer), thickness of solder paste (thicker)

■ Condition of hand soldering

Temperature: 370°C

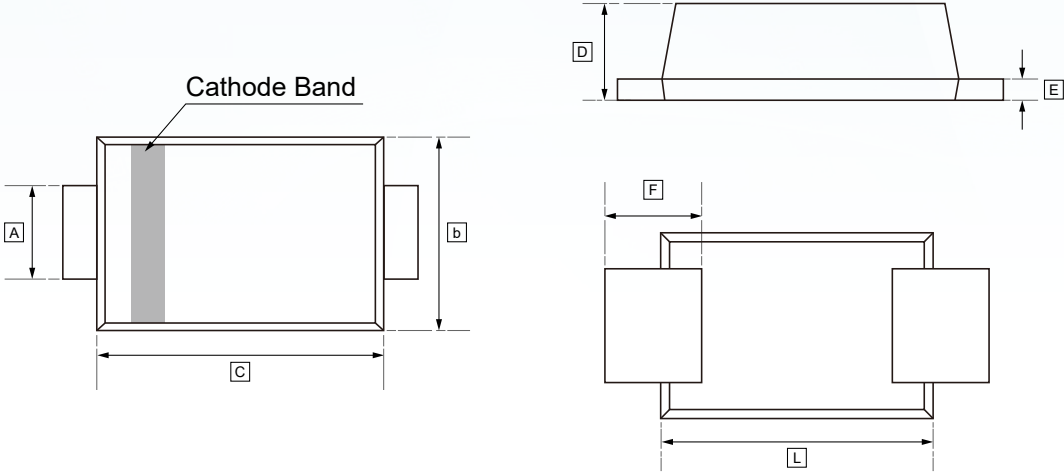
Time: 3s max.

Times: one time

■ Remark:

Lead free solder paste (96.5Sn/3.0Ag/0.5Cu)

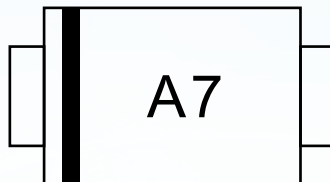
6.SOD123-FL Package Outline Dimensions



DIMENSIONS (mm are the original dimensions)

| Symbol | A | b | C | D | E | F | L |
|--------|-----|------|-----|-----|------|-----|-----|
| Min | 0.6 | 1.55 | 2.5 | 0.8 | 0.05 | 0.5 | 3.5 |
| Max | 1.0 | 1.95 | 2.9 | 1.2 | 0.25 | 1.1 | 3.9 |

7 .Ordering information



| Order Code | Marking | Package | Base QTY | Delivery Mode |
|------------|---------|-----------|----------|---------------|
| 1N4001 | A1 | SOD-123FL | 3000 | Tape and reel |
| 1N4002 | A2 | SOD-123FL | 3000 | Tape and reel |
| 1N4003 | A3 | SOD-123FL | 3000 | Tape and reel |
| 1N4004 | A4 | SOD-123FL | 3000 | Tape and reel |
| 1N4005 | A5 | SOD-123FL | 3000 | Tape and reel |
| 1N4006 | A6 | SOD-123FL | 3000 | Tape and reel |
| 1N4007 | A7 | SOD-123FL | 3000 | Tape and reel |

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