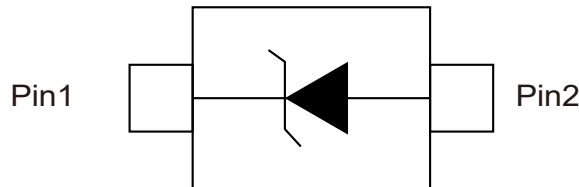


1. Pinning information



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 %.

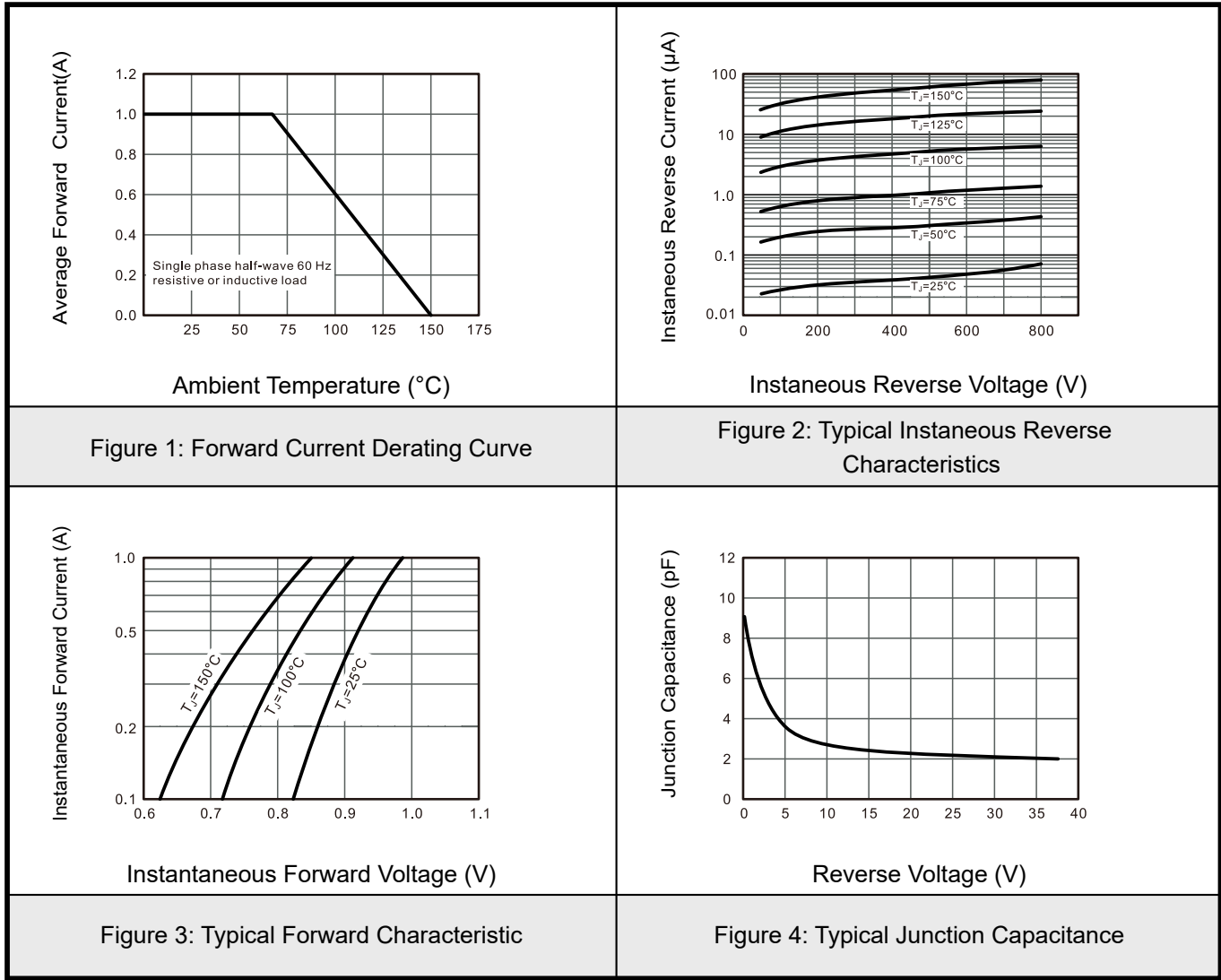
Notes:

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.



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

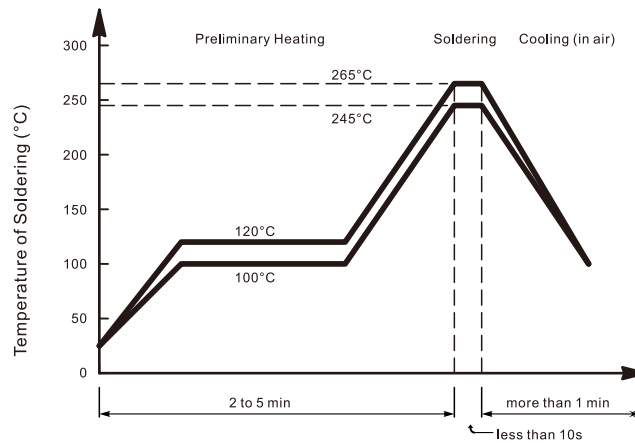
3. Typical characteristic



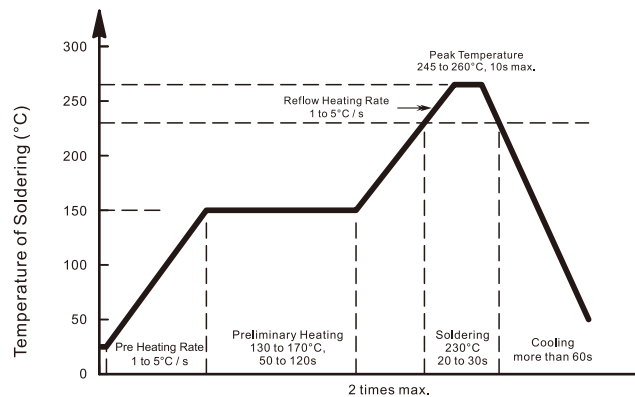


Surface Mount General Purpose Silicon Rectifiers
Reverse Voltage - 50 to 1000 V Forward Current - 1 A

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

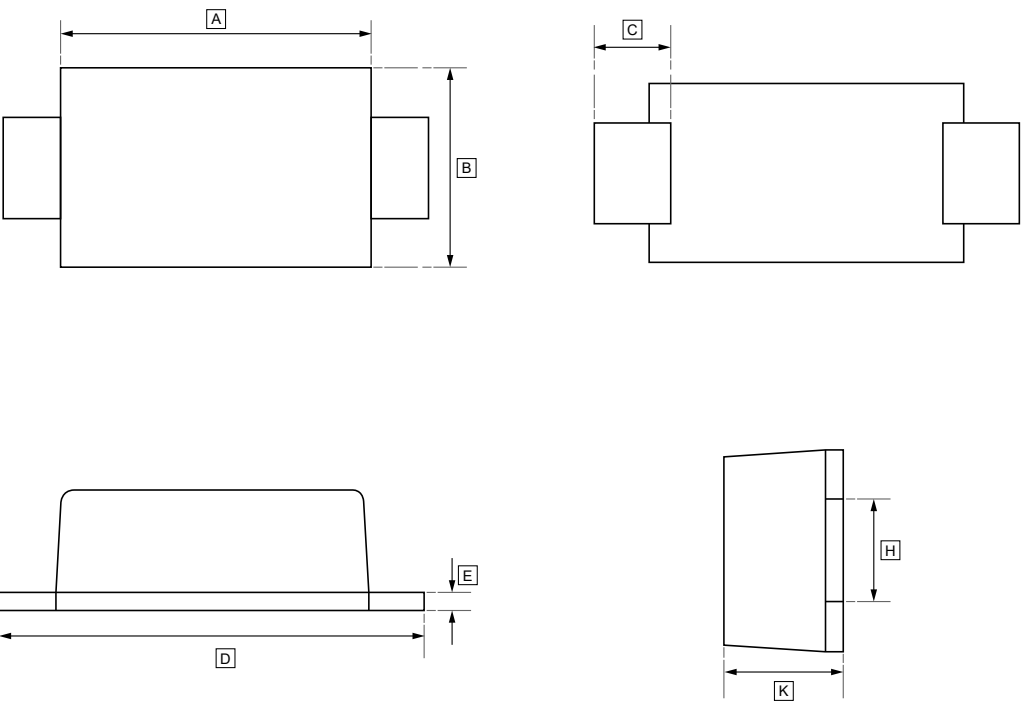
■ Remark:

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



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

6.SOD-123FL Package Outline Dimensions



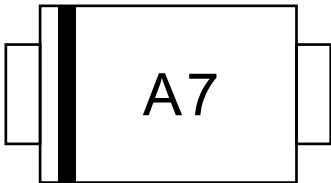
DIMENSIONS (mm are the original dimensions)

| Symbol | A | B | C | D | E | H | K |
|--------|------|------|------|------|------|------|------|
| Min | 2.70 | 1.70 | 0.45 | 3.50 | 0.10 | 0.80 | 0.98 |
| Max | 2.90 | 1.90 | 0.75 | 3.70 | 0.20 | 1.10 | 1.30 |



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

7 .Ordering information



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



8.Disclaimer

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