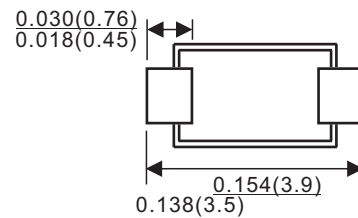
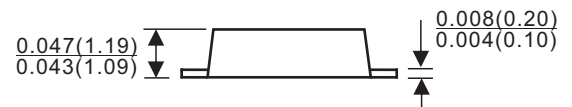
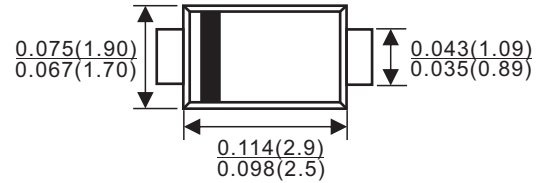




REVERSE VOLTAGE: 50 - 600 V

CURRENT: 1.0 A

SOD-123FL



Dimensions in inches and(millimeters)

Features

- ✧ Glass passivated device
- ✧ Ideal for surface mounted applications
- ✧ Low leakage current
- ✧ Metallurgically bonded construction
- ✧ High temperature soldering:
250 /10 seconds at terminals

Mechanical Data

- ✧ Case:JEDEC SOD-123FL,molded plastic over passivated chip
- ✧ Polarity: Color band denotes cathode end
- ✧ Weight: 0.003 ounces, 0.01 gram
- ✧ Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

Single phase,half wave,60Hz,resistive or inductive load.For capacitive load,derate current by 20%.

ABSOLUTE RATINGS

| | | ER 07A | ER 07B | ER 07C | ER 07D | ER 07E | ER 07G | ER 07H | ER 07J | UNITS |
|--|------------|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|
| Device marking | | E1A | E1B | E1C | E1D | E1E | E1G | E1H | E1J | |
| Maximum recurrent peak reverse voltage | V_{RRM} | 50 | 100 | 150 | 200 | 300 | 400 | 500 | 600 | V |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 105 | 140 | 210 | 280 | 350 | 420 | V |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 150 | 200 | 300 | 400 | 500 | 600 | V |
| Maximum average forward rectified current $T_A=65$ | $I_{(AV)}$ | 1.0 | | | | | | | | A |
| Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load $T_L=25$ | I_{FSM} | 30 | | | | | | | | A |
| Maximum instantaneous (NOTE 1) forward voltage at 1.0A | V_F | 0.95 | | | 1.25 | | 1.7 | | | V |
| Maximum DC reverse current @ $T_A=25$ at rated DC blocking voltage @ $T_A=125$ | I_R | 5.0 150 | | | | | | | | μ A |
| Maximum reverse recovery Time(note2) | T_{rr} | 35 | | | | | | | | nS |
| Operating temperature range | T_j | - 55 --- + 150 | | | | | | | | |
| Storage temperature range | T_{STG} | - 55 --- + 150 | | | | | | | | |

NOTES:1.Pulse test:300ms pulse width,1% duty cycle.

2.Measured with $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.

Ratings AND Characteristic Curves

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

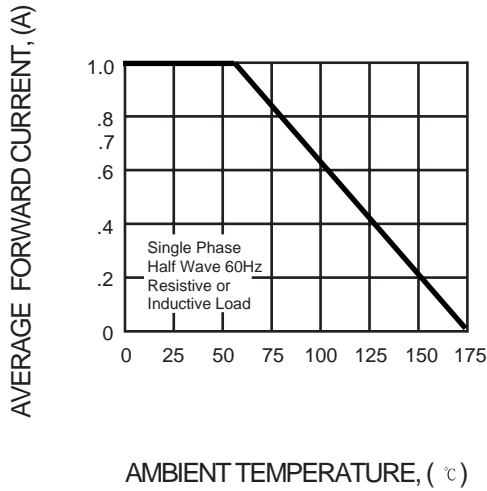


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

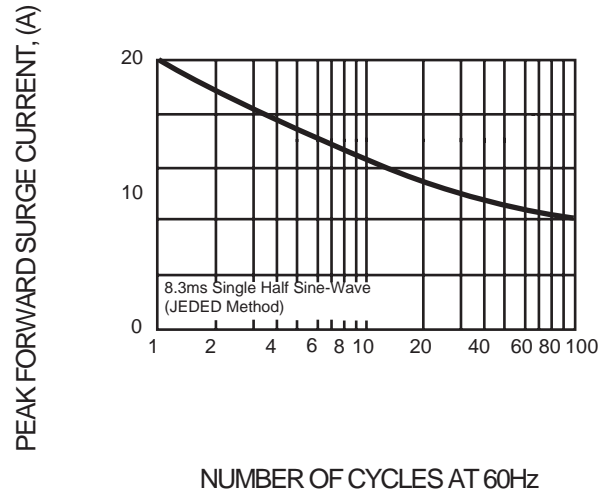


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

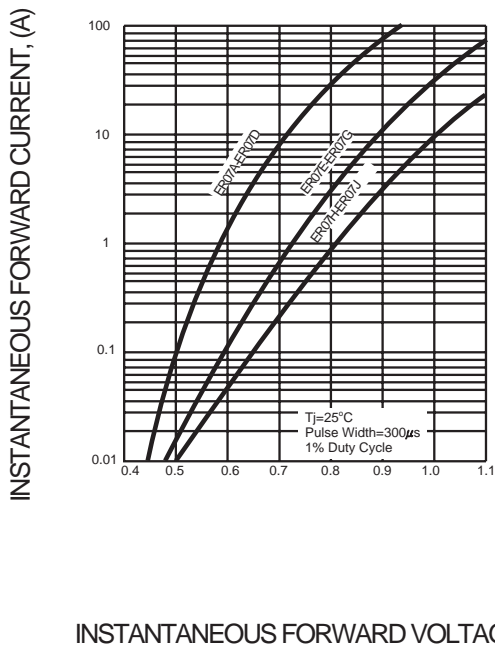
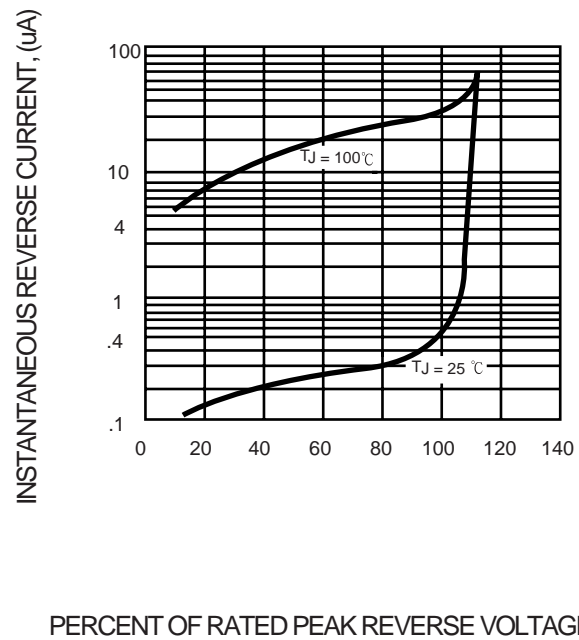


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



| PACKAGE | SPQ/PCS | CARTON SPQ/PCS | CARTON SIZE/CM | CARTON GW/KG | CARTON NW/KG |
|-----------|-----------|----------------|----------------|--------------|--------------|
| SOD-123FL | 3000/REEL | 90000 | 40X20X22 | 5.00 | 4.00 |