

Standard Surface Mounted Rectifiers

Reverse Voltage - 50 to 1000 V

Forward Current - 1.0 A

FEATURES

- ◆The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆Idea for surface mounted application
- ◆Glass passivated junction chip
- ◆Low reverse leakage
- ◆High forward surge current capability
- ◆High temperature soldering guaranteed 260°C/10 seconds at terminals

MECHANICAL DATA

- ◆Case : Molded plastic body
- ◆Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- ◆Polarity : Polarity symbol marking on body
- ◆Mounting Position : Any
- ◆Weight : 0.0045 ounce, 0.1296 grams

Maximum Ratings And Electrical Characteristics

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



DO-213AB/MELF

| Parameter | Symbols | SM4001 | SM4002 | SM4003 | SM4004 | SM4005 | SM4006 | SM4007 | 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 $T_L=100^\circ\text{C}$ | $I_{(AV)}$ | 1.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load | I_{FSM} | 30 | | | | | | | A |
| Maximum Instantaneous Forward Voltage at 1.0 A | V_F | 1.0 | | | | | | | V |
| Maximum DC reverse current at rated DC blocking voltage $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$ | I_R | 2 200 | | | | | | | μA |
| Typical junction capacitance (Note1) | C_J | 15 | | | | | | | pF |
| Typical Thermal Resistance | $R_{\theta JA}$ | 75 | | | | | | | $^\circ\text{C/W}$ |
| Operating Junction Temperature Range | T_J | -55 ~ +150 | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | -55 ~ +150 | | | | | | | $^\circ\text{C}$ |

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

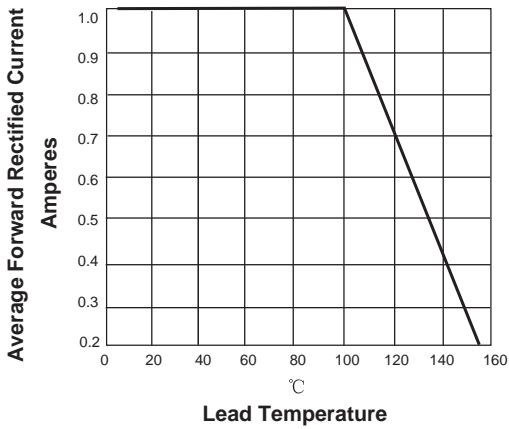


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

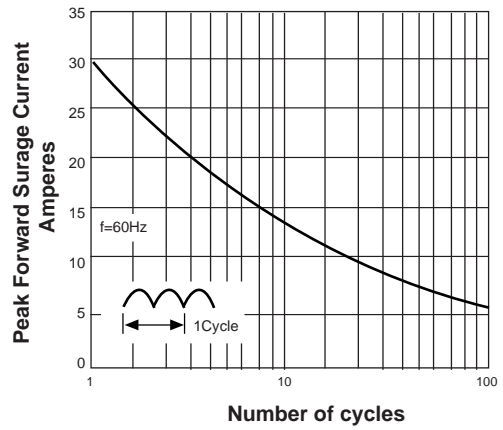


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

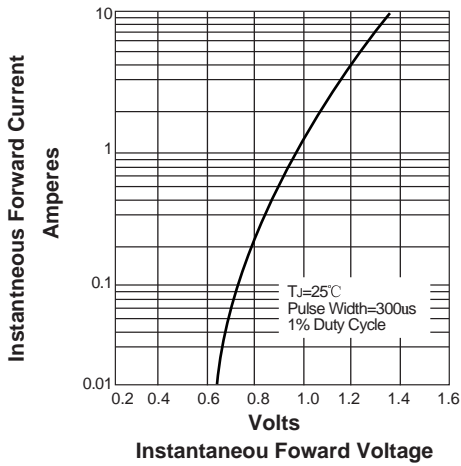
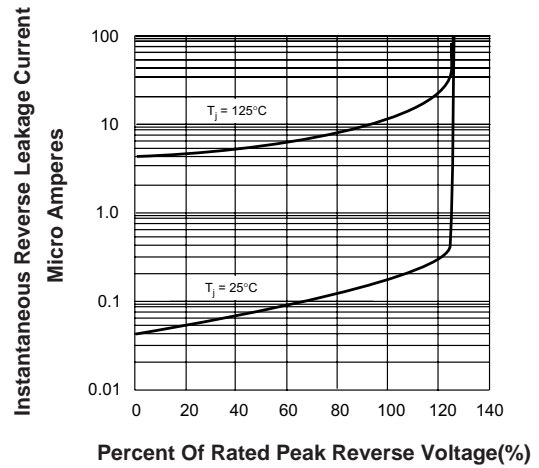
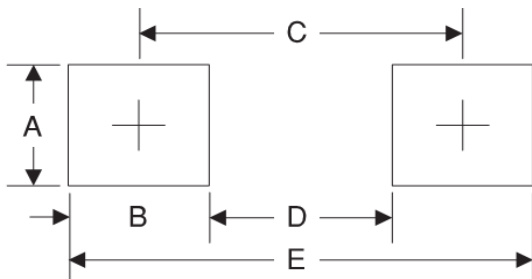


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



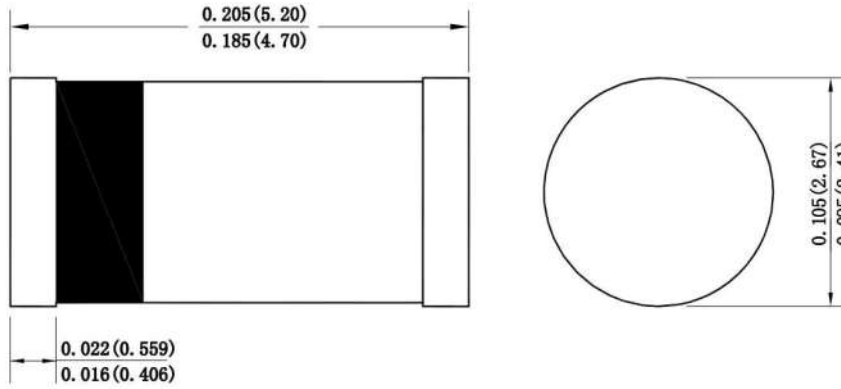
Suggested Pad Layout



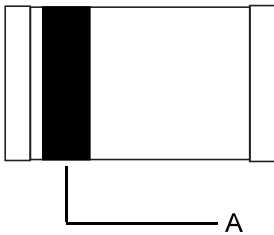
| Symbol | Unit (mm) | Unit (inch) |
|--------|-----------|-------------|
| A | 3.00 | 0.118 |
| B | 1.52 | 0.060 |
| C | 4.50 | 0.177 |
| D | 3.00 | 0.118 |
| E | 6.00 | 0.236 |

Package Outline

DO-213AB/MELF



Marking



| Symbol | Explanation |
|--------|----------------------------|
| A | Color Band Denotes Cathode |

Summary of Packing Options

| Package | Packing Description | Packing Quantity | Industry Standard |
|---------------|---------------------|------------------|-------------------|
| DO-213AB MELF | Tape/Reel, 13" reel | 5000 | EIA-481-1 |

单击下面可查看定价，库存，交付和生命周期等信息

[>>YFW\(佑风微\)](#)