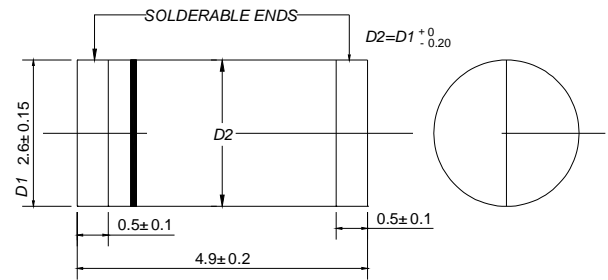




VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 3.0 A
DO - 213AB

Features

- ◇ Low cost
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Alcohol, Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0



Dimensions in millimeters

Mechanical Data

- ◇ Case: JEDEC DO-213AB, MELF
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.0046 ounces, 0.116 grams
- ◇ Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

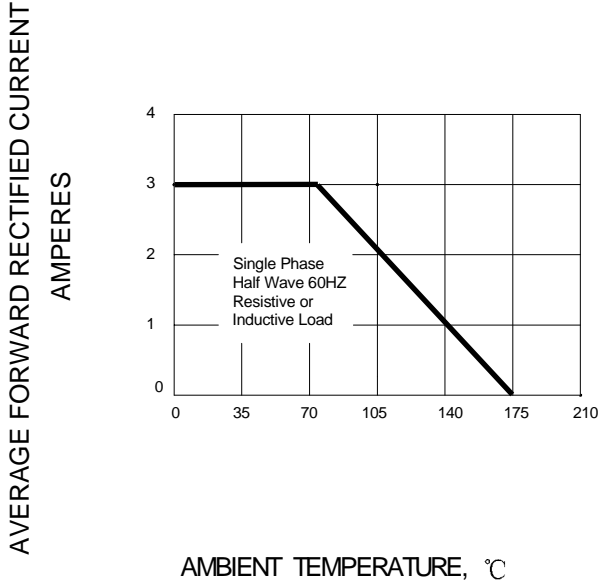
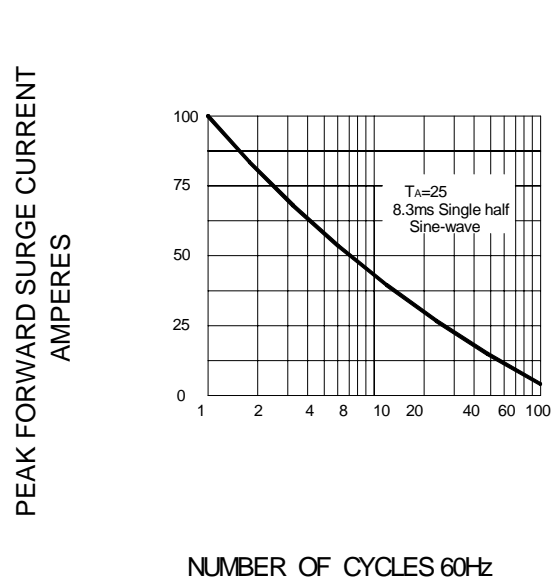
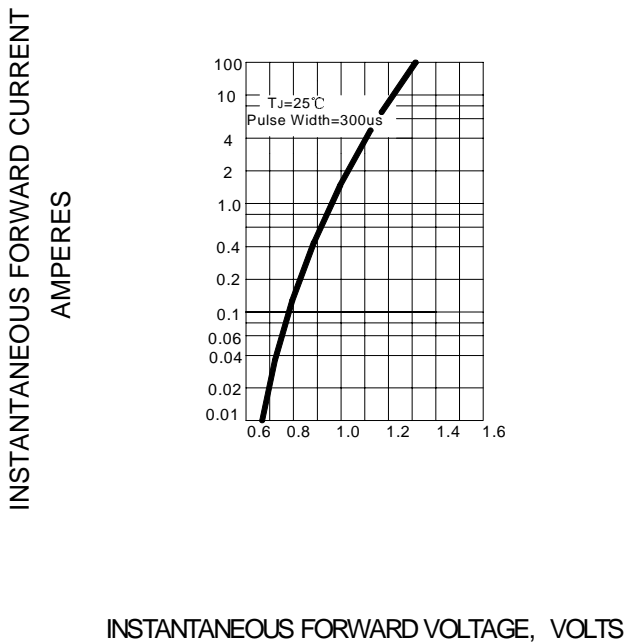
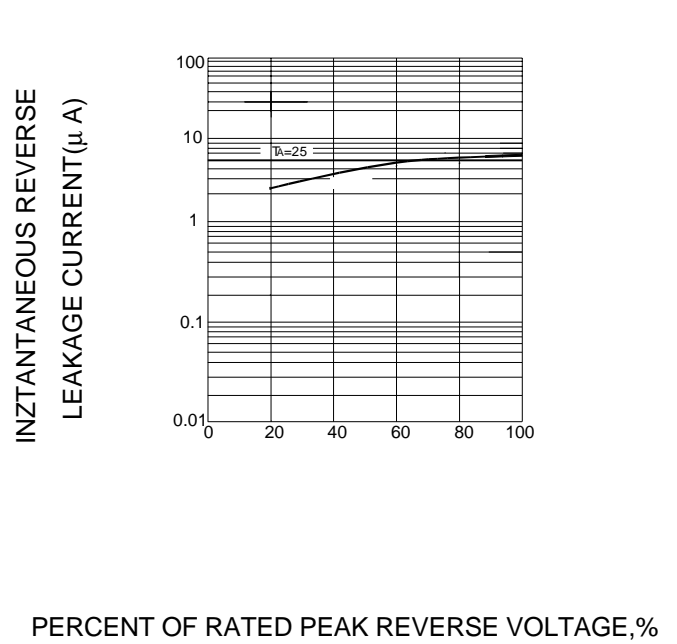
Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 50 Hz, resistive or inductive load. For capacitive load, derate by 20%.

| | | SM 5400 | SM 5401 | SM 5402 | SM 5403 | SM 5404 | SM 5405 | SM 5406 | SM 5407 | SM 5408 | UNITS |
|---|-------------|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|------------|
| Maximum recurrent peak reverse voltage | V_{RRM} | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 140 | 210 | 280 | 350 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current @ $T_A = 50^\circ C$ | $I_{F(AV)}$ | 3.0 | | | | | | | | | A |
| Peak forward surge current 10ms single half-sine-wave superimposed on rated load @ $T_A = 25^\circ C$ | I_{FSM} | 100 | | | | | | | | | A |
| Maximum instantaneous forward voltage @ 3.0 A | V_F | 1.2 | | | | | | | | | V |
| Maximum reverse current at rated DC blocking voltage | I_R | 10.0 | | | | | | | | | μA |
| Typical thermal resistance junction to terminal | R_{thT} | 10 | | | | | | | | | K/W |
| Typical thermal resistance (Note1) | R_{thA} | 40 | | | | | | | | | K/W |
| Operating junction temperature range | T_J | - 50 ---- + 175 | | | | | | | | | $^\circ C$ |
| Storage temperature range | T_{STG} | - 50 ---- + 175 | | | | | | | | | $^\circ C$ |

NOTE: 1. Thermal resistance from junction to ambient.

Ratings AND Characteristic Curves

FIG.1 – FORWARD DERATING CURVE

FIG.2 – PEAK FORWARD SURGE CURRENT

FIG.3 – TYPICAL FORWARD CHARACTERISTIC

FIG.4 – TYPICAL JUNCTION CAPACITANCE


| PACKAGE | SPQ/PCS | CARTON SPQ/PCS | CARTON SIZE/CM | CARTON GW/KG | CARTON NW/KG |
|----------|-----------|----------------|----------------|--------------|--------------|
| DO-213AB | 5000/REEL | 80000 | 36.0X35.8X36.5 | 18.00 | 16.00 |