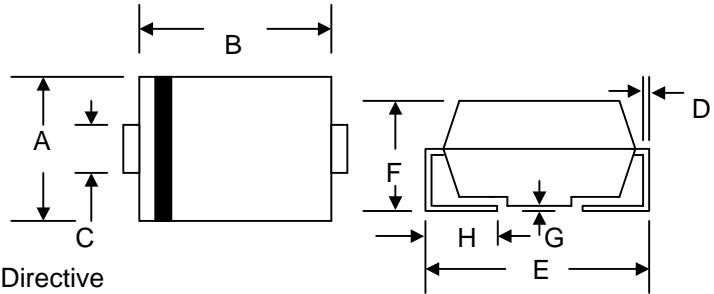


Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Surge Overload Rating to 100A Peak
- Low Power Loss
- Ultra-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O
- Green Products in Compliance with the RoHS Directive



Mechanical Data

- Case: Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.21 grams (approx.)

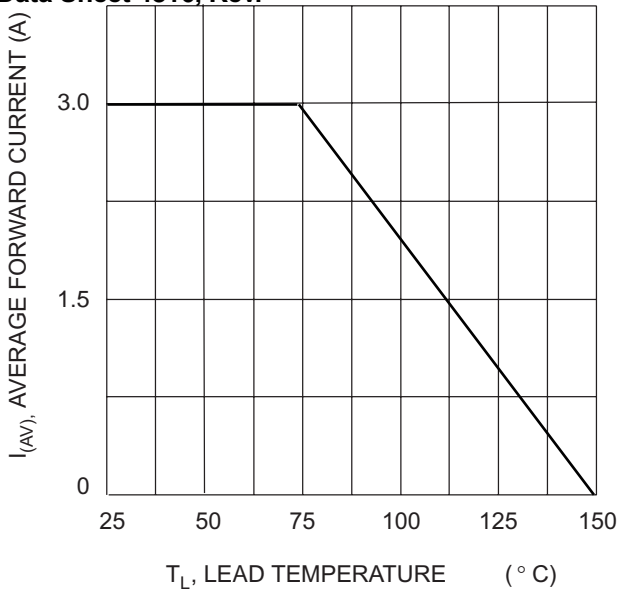
| SMC/DO-214AB | | | | |
|--------------|-------|-------|--------------|----------------|
| Dim | Min | Max | Min | Max |
| A | 5.59 | 6.22 | 0.220 | 0.245 |
| B | 6.60 | 7.11 | 0.260 | 0.280 |
| C | 2.75 | 3.25 | 0.108 | 0.128 |
| D | 0.152 | 0.305 | 0.006 | 0.012 |
| E | 7.75 | 8.13 | 0.305 | 0.320 |
| F | 2.00 | 2.62 | 0.079 | 0.103 |
| G | 0.051 | 0.203 | 0.002 | 0.008 |
| H | 0.76 | 1.27 | 0.030 | 0.05 |
| | | | In mm | In inch |

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

| Characteristic | Symbol | UF3A-G | UF3B-G | UF3D-G | UF3G-G | UF3J-G | UF3K-G | Unit |
|--|-----------------------------------|-------------|--------|--------|--------|--------|--------|------|
| Peak Repetitive Reverse Voltage | V _{RRM} | | | | | | | |
| Working Peak Reverse Voltage | V _{RWM} | 50 | 100 | 200 | 400 | 600 | 800 | V |
| DC Blocking Voltage | V _R | | | | | | | |
| RMS Reverse Voltage | V _{R(RMS)} | 35 | 70 | 140 | 280 | 420 | 560 | V |
| Average Rectified Output Current @T _L = 75°C | I _o | 3.0 | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) @T _A = 55°C | I _{FSM} | 100 | | | | | | A |
| Forward Voltage @I _F = 3.0A | V _{FM} | 1.0 | | 1.4 | | 1.7 | | V |
| Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C | I _{RM} | 10 500 | | | | | | μA |
| Reverse Recovery Time (Note 1) | t _{rr} | 50 | | | | 100 | | nS |
| Typical Junction Capacitance (Note 2) | C _j | 75 | | | | 50 | | pF |
| Typical Thermal Resistance (Note 3) | R _{θJL} | 15 | | | | | | K/W |
| Operating and Storage Temperature Range | T _j , T _{STG} | -50 to +150 | | | | | | °C |

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A,
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
3. Mounted on P.C. Board with 8.0mm² land area.

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T_L , LEAD TEMPERATURE ($^{\circ}$ C)
Fig. 1 Forward Current Derating Curve

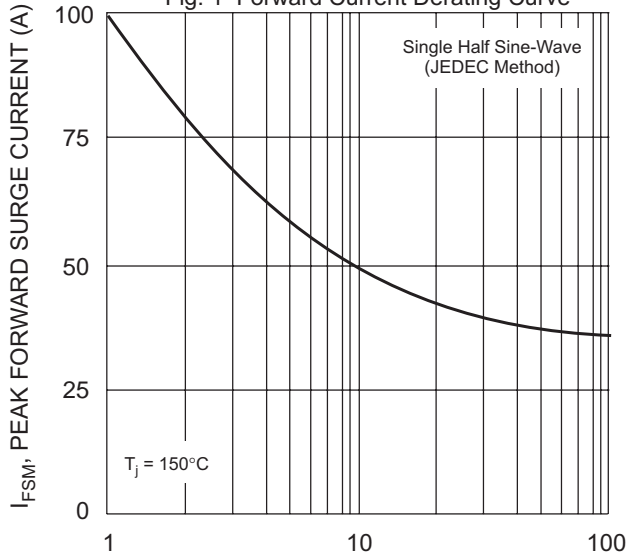
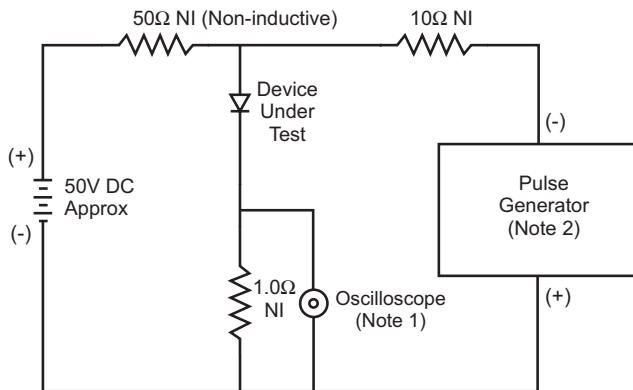


Fig. 3 Forward Surge Current Derating Curve



- Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0M Ω , 22pF.
2. Rise Time = 10ns max. Input Impedance = 50 Ω .

Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

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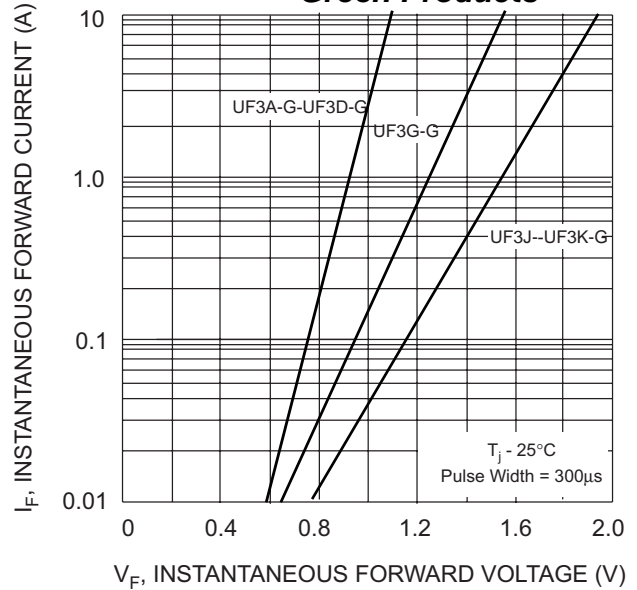


Fig. 2 Typical Forward Characteristics

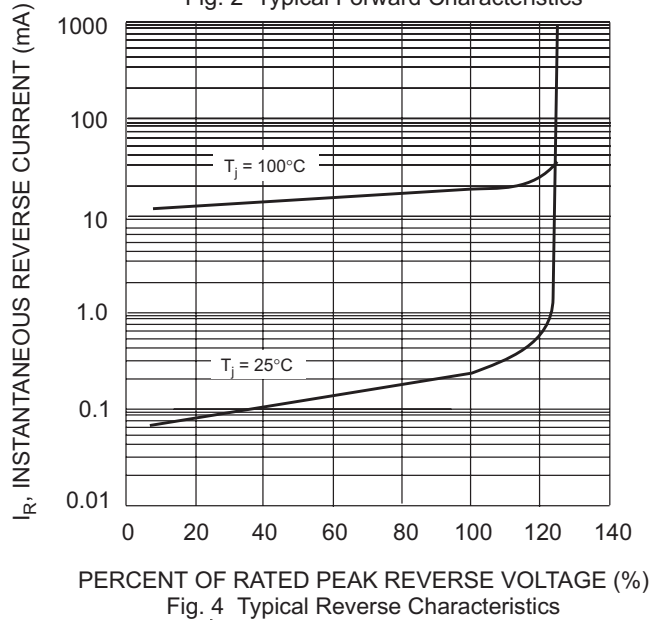
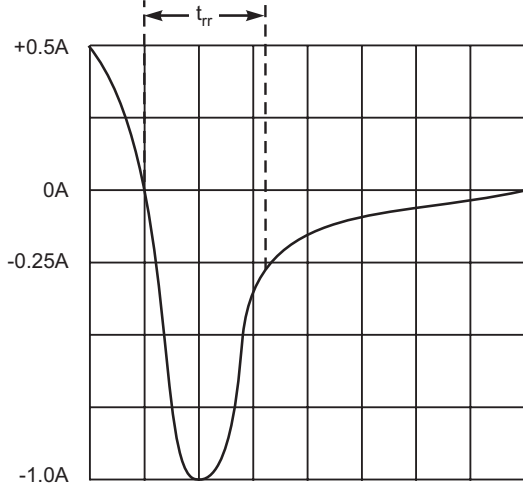


Fig. 4 Typical Reverse Characteristics



Set time base for 10ns/cm

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