

1.5 Amp. Surface Mounted Glass Passivated Fast Recovery Rectifier

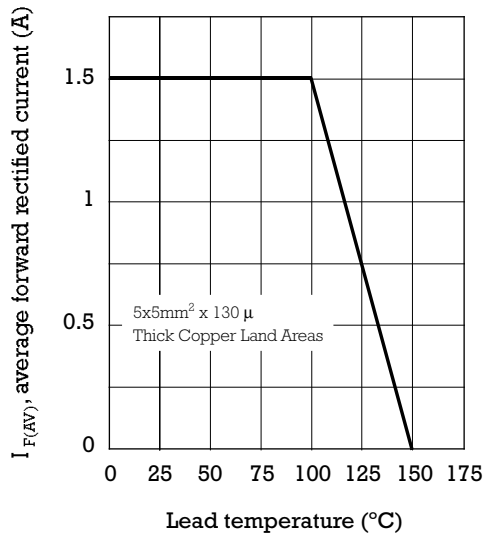
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|---|--|
| <p>Dimensions in mm.</p> <p>CASE: SMB/DO-214AA</p> <p>Week code Year code Type No. Class</p> <p>Standard soldering pad</p> | <p>Voltage 50 to 1000 V</p> <p>Current 1.5 A</p> |
| <ul style="list-style-type: none"> Glass passivated junction High current capability The plastic material carries U/L 94 V-0 Low profile package Easy pick and place High temperature soldering 260 °C 10 sec | |
| <p>MECHANICAL DATA</p> <p>Terminals: Solder plated, solderable per IEC 68-2-20. Standard Packaging: 8 mm. tape (EIA-RS-481). Weight: 0.093 g.</p> | |

Maximum Ratings and Electrical Characteristics at 25 °C

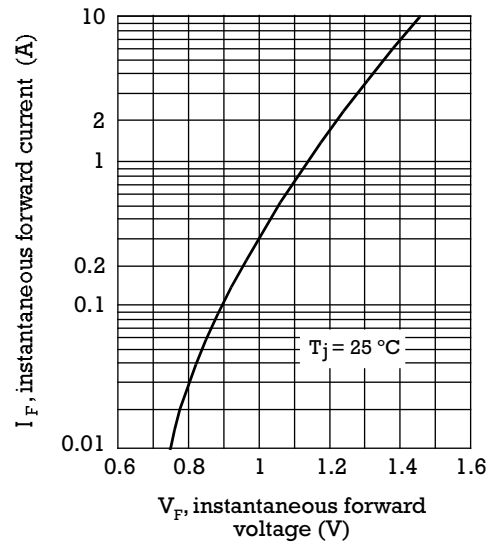
| | | FRS2A | FRS2B | FRS2D | FRS2G | FRS2J | FRS2K | FRS2M |
|--------------------------------|---|---|-------|-------|-------|--------|--------|-------|
| Marking Code | | G1 | G2 | G3 | G4 | G5 | G6 | G7 |
| V_{RRM} | Maximum Recurrent Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| V_{RMS} | Maximum RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 |
| V_{DC} | Maximum DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| $I_{F(AV)}$ | Forward current at $T_L = 100\text{ °C}$ | 1.5 A | | | | | | |
| I_{FSM} | 8.3 ms. peak forward surge current (Jedec Method) | 50 A | | | | | | |
| V_F | Maximum Instantaneous Forward Voltage at 1.5 A | 1.3 V | | | | | | |
| I_R | Maximum DC Reverse Current at Rated DC Blocking Voltage | $T_a = 25\text{ °C}$: 5 μ A $T_a = 125\text{ °C}$: 200 μ A | | | | | | |
| t_{rr} | Maximum Reverse Recovery Time (0.5/1/0.25A) | 150 ns | | | | 250 ns | 300 ns | |
| C_j | Typical Junction Capacitance (1MHz; -4V) | 35 pF | | | | | | |
| $R_{th(j-l)}$ $R_{th(j-a)}$ | Typical Thermal Resistance (5x5 mm ² x 130 μ Copper Area) | 20 °C/W 60 °C/W | | | | | | |
| $T_j - T_{stg}$ | Operating Junction and Storage Temperature Range | -55 to + 150 °C | | | | | | |

Rating And Characteristic Curves

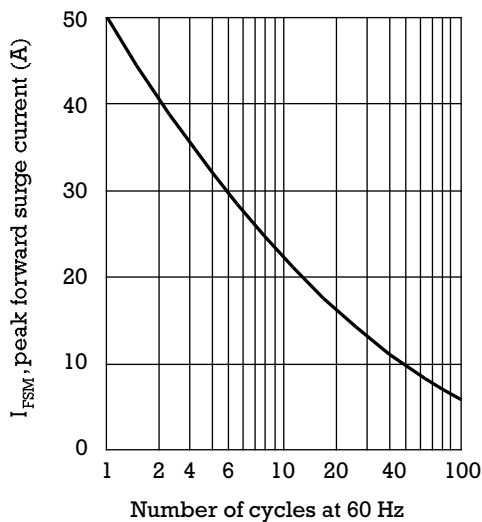
FORWARD CURRENT DERATING CURVE



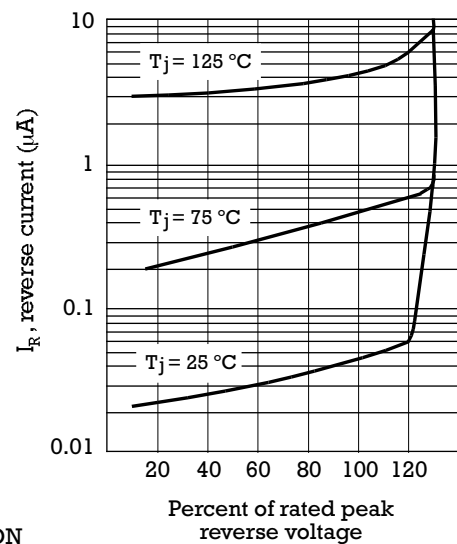
TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTIC



TYPICAL JUNCTION CAPACITANCE

