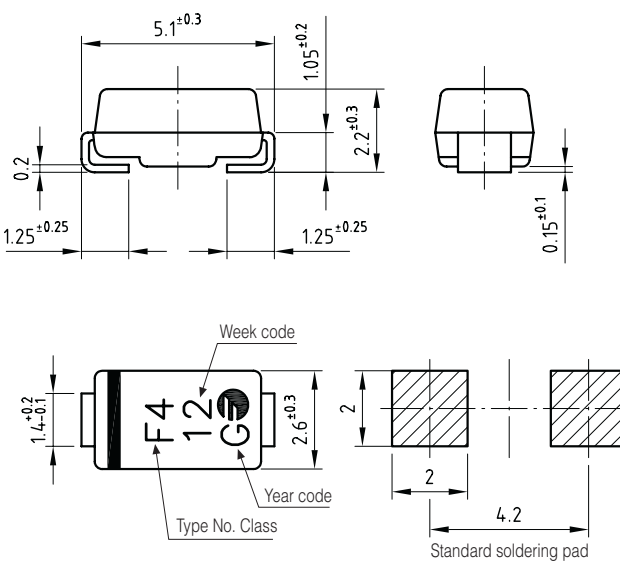



1.0 Amp. Surface Mounted Glass Passivated Ultrafast Efficient Rectifier

| | |
|--|--|
| <p>Dimensions in mm.</p>  <p>CASE: SMA/DO-214AC</p> <p>Week code F4 12 C Year code Type No. Class</p> | <p>Voltage 50 to 200 V</p> <p>Current 1.0 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 Terminals: Solder plated, solderable per IEC 68-2-20. Standard Packaging: 4 mm. tape (EIA-RS-481). Weight: 0.064 g.</p> |
|--|--|

Maximum Ratings and Electrical Characteristics at 25 °C

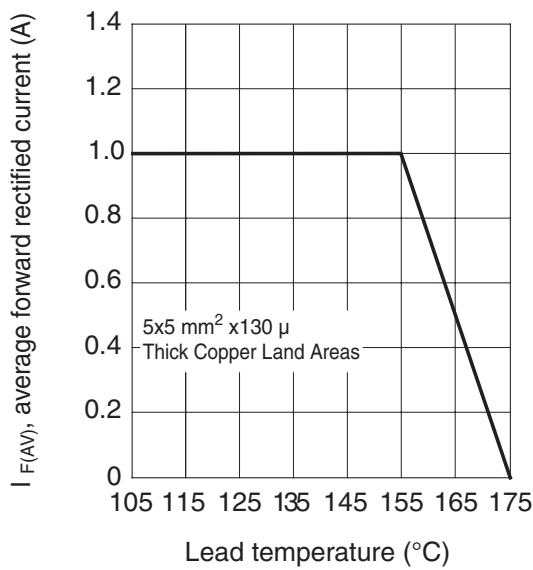
| | | FUES1A | FUES1B | FUES1D |
|---------------------|---|-------------------------|--------|--------|
| Marking Code | | UA | UB | UD |
| V_{RRM} | Maximum Recurrent Peak Reverse Voltage (V) | 50 | 100 | 200 |
| V_{RMS} | Maximum RMS Voltage (V) | 35 | 70 | 140 |
| V_{DC} | Maximum DC Blocking voltage (V) | 50 | 100 | 200 |
| $I_{F(AV)}$ | Forward current at $T_L = 75\text{ °C}$ | 1.0 A | | |
| I_{FSM} | 8.3 ms. peak forward surge current (Jedec Method) | 30 A | | |
| V_F | Max. Instantaneous Forward Voltage Drop at 1.0 A at 0.6 A | 0.920 V 0.865 V | | |
| I_R | Maximum DC Reverse Current $T_a = 25\text{ °C}$ at Rated DC Blocking Voltage $T_a = 125\text{ °C}$ | 1 μ A 25 μ A | | |
| T_{rr} | Typical Reverse Recovery Time (0.5/1/0.25A) | 25 ns | | |
| C_j | Typical Junction Capacitance (1MHz; -4V) | 8 pF | | |
| $R_{th(j-i)}$ | Typical Thermal Resistance | 27 °C/W | | |
| $R_{th(j-a)}$ | (5x5 mm ² x 130 μ Copper Area) | 75 °C/W | | |
| $T_j - T_{stg}$ | Operating Junction and Storage Temperature Range | -55 to + 175 °C | | |

Electrical Characteristics at $T_j = -40\text{ }^\circ\text{C}$ to $+150\text{ }^\circ\text{C}$

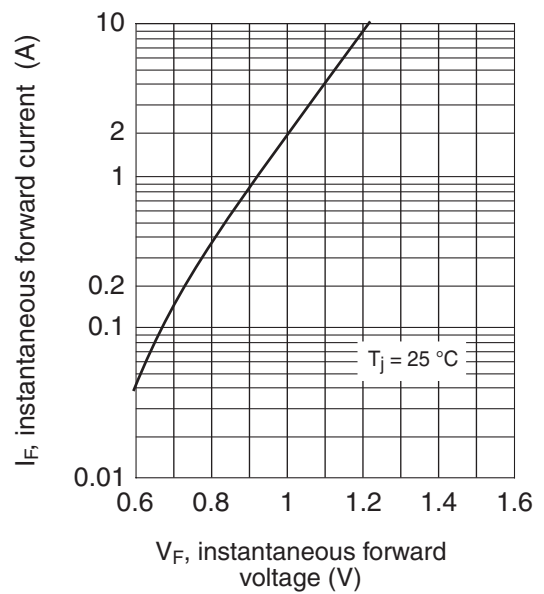
| | | |
|-------|---|--------------------|
| V_F | Max. forward voltage drop at $I_F = 1\text{ A}$ | 1.05 V |
| I_R | Maximum DC Reverse Current at rated DC Blocking Voltage | 1500 μA |

Rating And Characteristic Curves

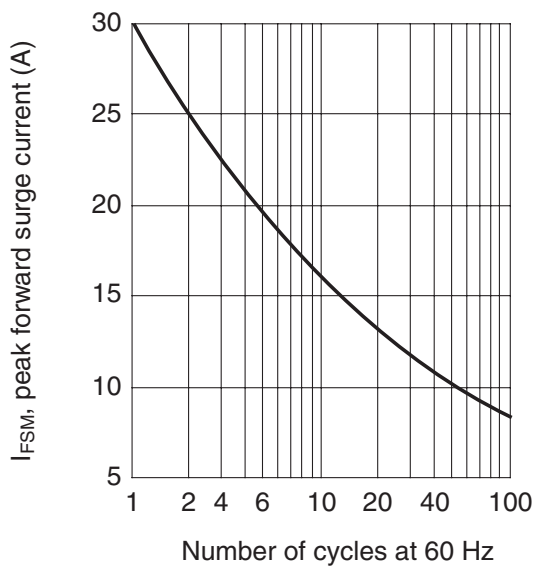
FORWARD CURRENT DERATING CURVE



TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

