



# UF2A THRU UF2M

## SURFACE MOUNT FAST SWITCHING RECTIFIER

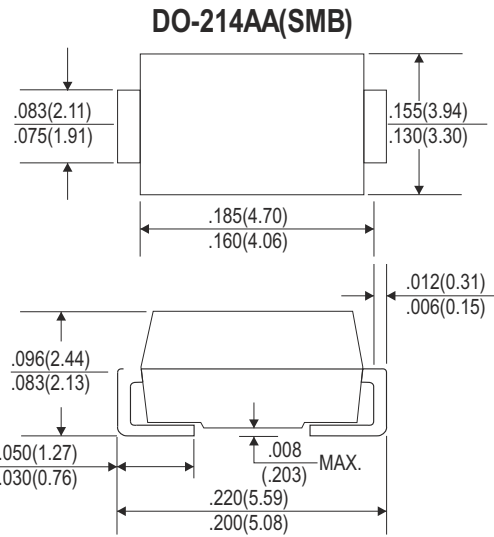
**Voltage Range 50 to 1000 Volts**  
**Current 2.0 Amperes**

### Features

- \* Low forward voltage drop
- \* Plastic material used carries Underwriters Laboratory Classification 94V-0
- \* For surface mounted application
- \* Glass passivated junction
- \* Built-in strain relief
- \* Ultrafast recovery times for high efficiency
- \* High temperature soldering: 250°C/10 seconds at terminals

### Mechanical Data

- \* Case: Molded plastic
- \* Terminals: Solder plated
- \* Polarity: Indicated by cathode band
- \* Packing: 12mm tape
- \* Weight: 0.093 gram



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

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

Type Number	UF2A	UF2B	UF2D	UF2G	UF2J	UF2K	UF2M	Units
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_A = 90^\circ\text{C}$	2.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) $T_A = 55^\circ\text{C}$	50.0							A
Maximum Instantaneous Forward Voltage @ 2.0A	1.0		1.4		1.7			V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$	10.0							uA
At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	200							uA
Maximum Thermal Resistance (Note1) $T_J = 25^\circ\text{C}$	50.0				100.0			uS
Typical Junction capacitance (Note2)	28							pF
Maximum Thermal Resistance (Note3)	20.0							°C
Operating and Storage Temperature Range	-50 to +150							°C

#### Notes:

1. Reverse Recovery Test Conditions:  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{RR} = 0.25\text{A}$
2. Measured at 1 MHz and Applied VR = 4.0 Volts.
3. 8.0mm<sup>2</sup> (.13mm thick) land areas

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### Voltage Range 50 to 1000 Volts

### Current 2.0 Amperes

#### RATING AND CHARACTERISTIC CURVES ( UF2A THRU UF2M )

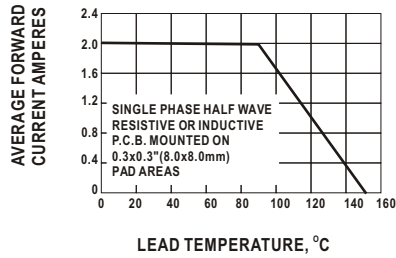


FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

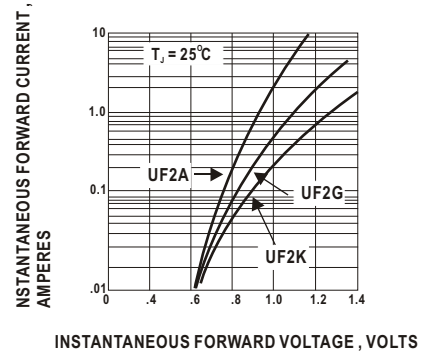


FIG. 2 - TYPICAL FORWARD CHARACTERISTICS PER ELEMENT

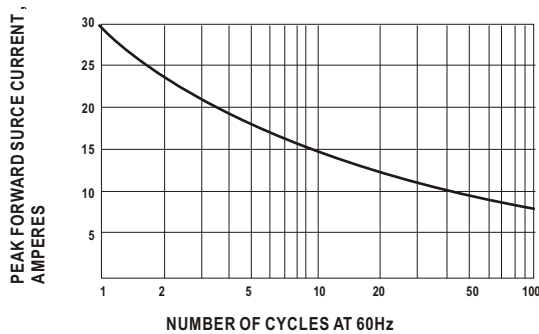


FIG. 3 - MAXIMUM FORWARD SURGE CURRENT

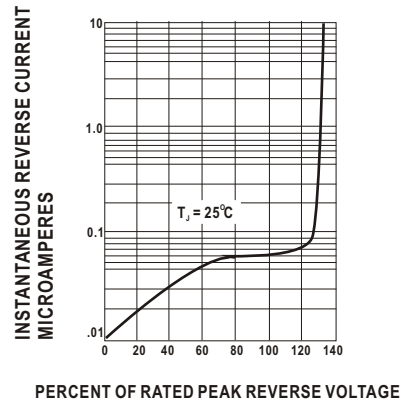


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

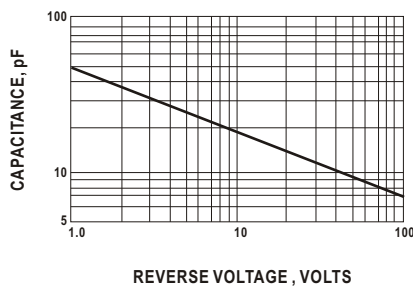


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

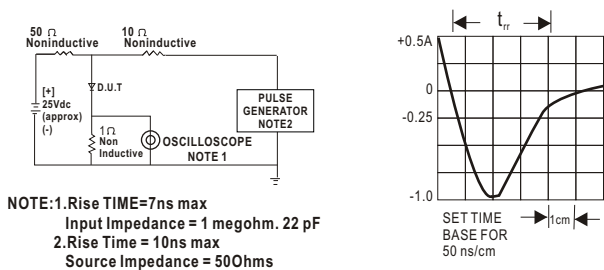


Fig. 6 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM