



# US1A Thru US1M

## 1 AMP SURFACE MOUNT GLASS FAST RECOVERY RECTIFIER

### FEATURES

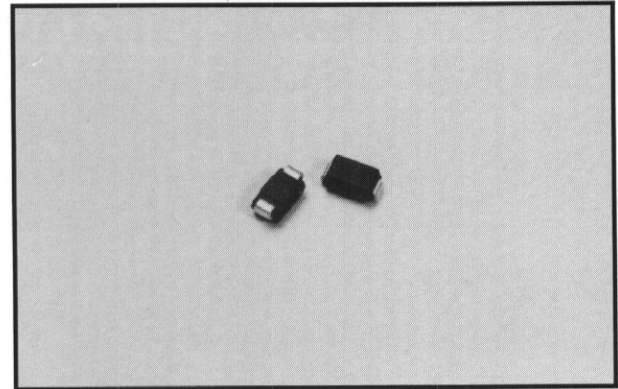
- Rating to 1000V PRV
- For surface mount applications
- Reliable low cost construction utilizing molded plastic technique
- Glass passivated junction
- High temperature soldering: 250 °C/10 seconds at terminal
- UL recognized 94V-O plastic material
- Fast switching for high efficiency

### Mechanical Data

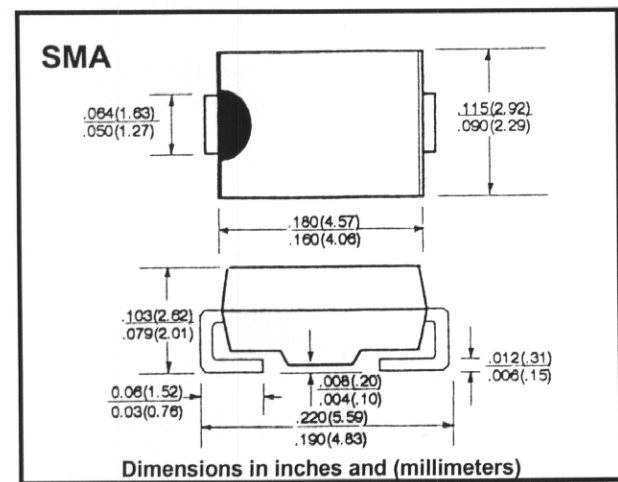
- Case: Molded Plastic
- Polarity: Indicated on cathode
- Weight: 0.002 ounces, 0.064 grams

### Maximum Ratings & Characteristics

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



### Outline Drawing



		US1A	US1B	US1D	US1G	US1J	US1K	US1M	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Input Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Current @ T <sub>L</sub> = 75°C	I <sub>(AV)</sub>	1.0							A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load	I <sub>FSM</sub>	30							A
Maximum DC Forward Voltage Drop Per Element At 1.0A DC	V <sub>F</sub>	1.0		1.3		1.7		V	
Maximum Reverse Current At Rated DC Blocking Voltage per Element	I <sub>R</sub>	5 100							μA μA
Maximum Reverse Recovery* (See Note)	t <sub>rr</sub>	50				75		nS	
Typical Junction Capacitance**(See Note)	C <sub>J</sub>	20				10		pF	
Maximum Thermal Resistance*** (See Note)	R <sub>(THJL)</sub>	30							°C/W
Operating Temperature Range	T <sub>J</sub>	-65 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150							°C

Note: \*Test Conditions: I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.25A

\*\*Measured at 1.0MHz and applied reverse voltage of 4.0V DC