

# 1N5802US - 1N5806US

## GLASS PASSIVATED JUNCTION ULTRA FAST RECTIFIERS

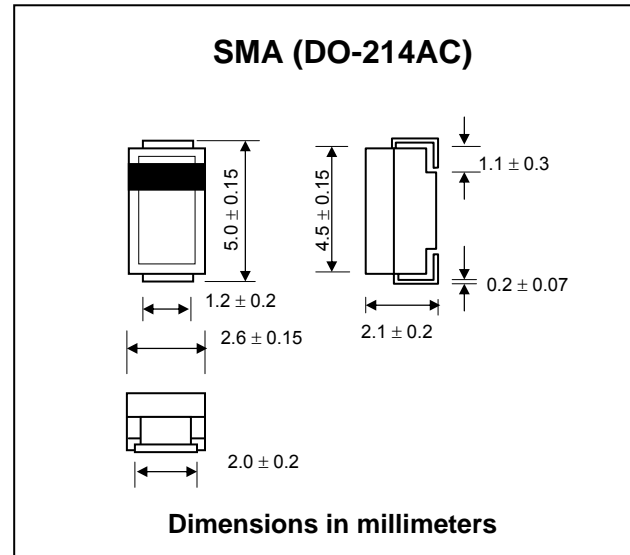
**PRV : 50 - 150 Volts**  
**Io : 2.5 Amperes**

### FEATURES :

- \* Glass passivated junction chip
- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Ultrafast recovery time
- \* Pb / RoHS Free

### MECHANICAL DATA :

- \* Case : SMA Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Lead Formed for Surface Mount
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.067 gram



### 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%.

RATING	SYMBOL	1N5802US	1N5803US	1N5804US	1N5805US	1N5806US	UNIT
Maximum Working Peak Reverse Voltage	$V_{RWM}$	50	75	100	125	150	V
Minimum Breakdown Voltage @ 100 $\mu$ A	$V_{BR(Min)}$	55	80	110	135	160	V
Maximum Average Forward Current	$I_{F(AV)}$	2.5 ( $T_L = 75^\circ\text{C}$ , Note 1)					A
		1.0 ( $T_a = 55^\circ\text{C}$ )					
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	35					A
Maximum Peak Forward Voltage at $I_F = 1.0$ A.	$V_F$	0.875					V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	1.0					$\mu$ A
	$I_{R(H)}$	50 ( $T_a = 100^\circ\text{C}$ )					
Maximum Reverse Recovery Time (Note2)	$T_{rr}$	25					ns
Junction Temperature Range	$T_J$	- 65 to + 175					$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 65 to + 175					$^\circ\text{C}$

#### Notes :

(1)  $I_{F(AV)} = 2.5\text{A}$  @  $T_L = 75^\circ\text{C}$ . Derate at 25mA/ $^\circ\text{C}$  for  $T_L$  above 125 $^\circ\text{C}$ .

(2) Reverse Recovery Test Conditions :  $I_F = 0.5$  A,  $I_R = 1.0$  A,  $I_{rr} = 0.25$  A.