

1N5802US - 1N5806US

GLASS PASSIVATED JUNCTION ULTRA FAST RECTIFIERS

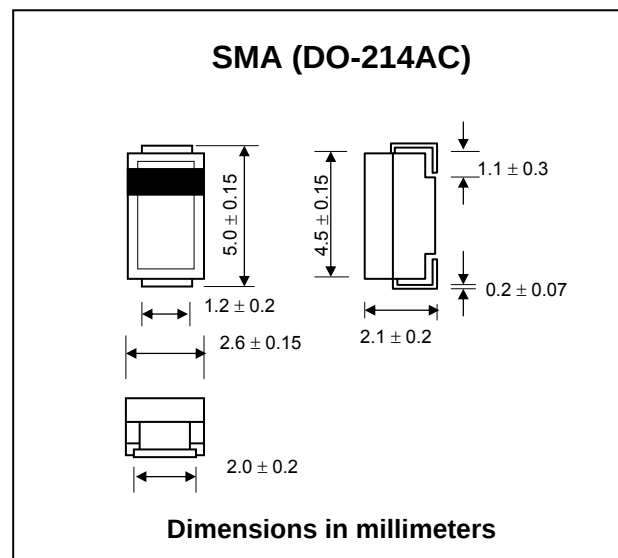
PRV : 50 - 150 Volts
Io : 2.5 Amperes

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 @ 100μA	V _{BR(Min)}	55	80	110	135	160	V
Maximum Average Forward Current	I _{F(AV)}	2.5 (T _L = 75 °C, Note 1)					A
		1.0 (Ta = 55 °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 If = 1.0 A.	V _F	0.875					V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	1.0					μA
	I _{R(H)}	50 (Ta = 100 °C)					
Maximum Reverse Recovery Time (Note2)	T _{rr}	25					ns
Junction Temperature Range	T _J	- 65 to + 175					°C
Storage Temperature Range	T _{STG}	- 65 to + 175					°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.