

## RB301S Thru RB309S

### . FEATURES

. Plastic Package has Underwriters Laboratory

Flammability Classification 94V-0

. Glass passivated chip junctions

. Single in-line package

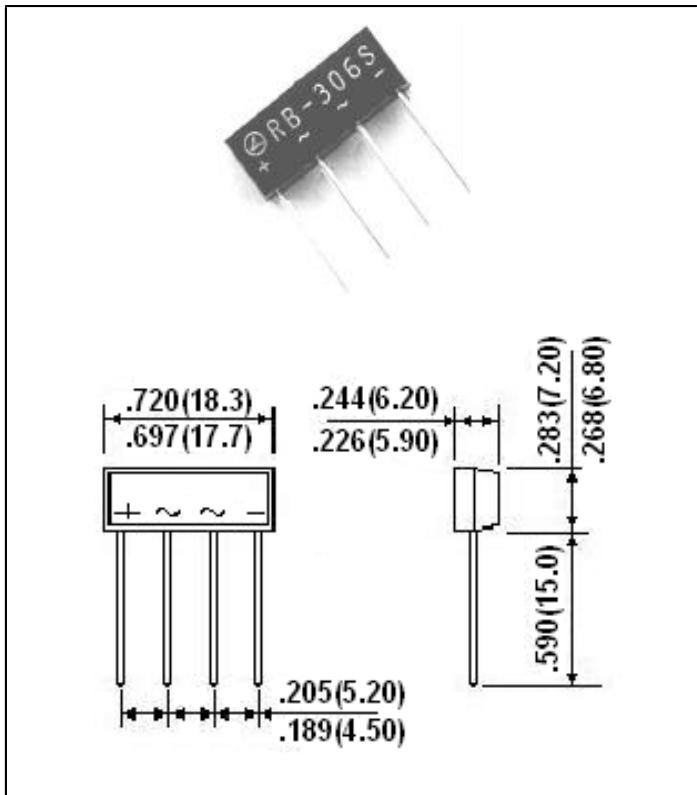
. High current capacity with small package

. Superior thermal conductivity

. High temperature soldering guaranteed:

**260 /10 seconds**

. High  $I_{F\text{SM}}$

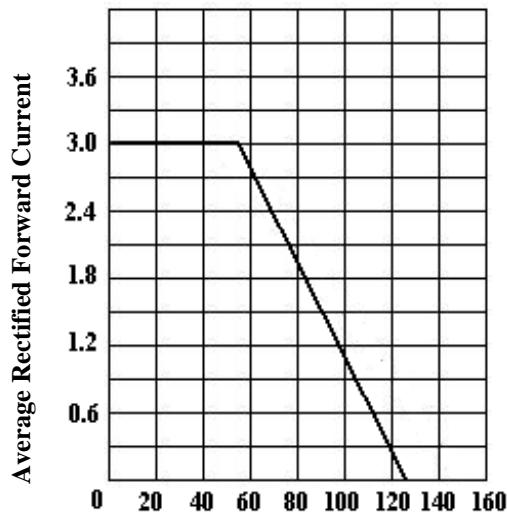


. Maximum Ratings & Thermal Characteristics Ratings at 25° ambient temperature unless otherwise specified.

Parameter Symbol	Symbol	RB301S	RB302S	RB304S	RB306S	RB308S	RB309S	Unit
Maximum repetitive voltage	$V_{RM}$	100	200	400	600	800	1000	V
Maximum DC reverse current at rated DC blocking voltage	$I_R$ TA=25 TA=125				10 500			$\mu A$
Average rectified forward current 60Hz Sine wave Resistance load with heat sink $T_c=100$	$I_o$				3			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{F\text{SM}}$				80			A
Maximum instantaneous forward voltage at 3A	$V_F$				1.0			V
Operating junction temperature	$T_J$				125			
Storage temperature	$T_{Stg}$				-40~150			

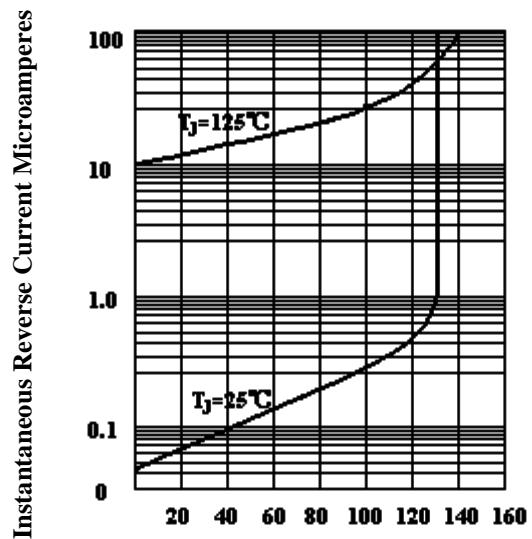
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**Fig.1 derating Curve**



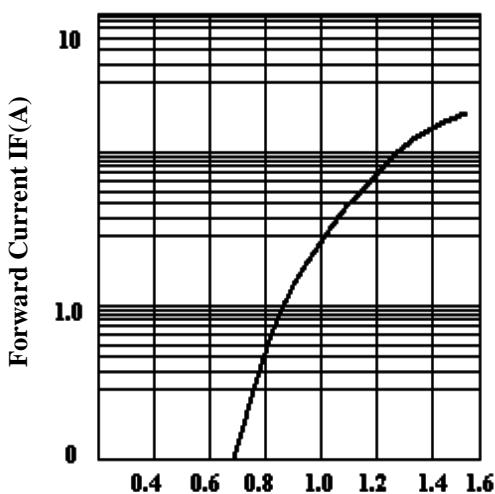
Case Temperature Tc( °C )

**Fig.2 Typical Reverse Characteristics**



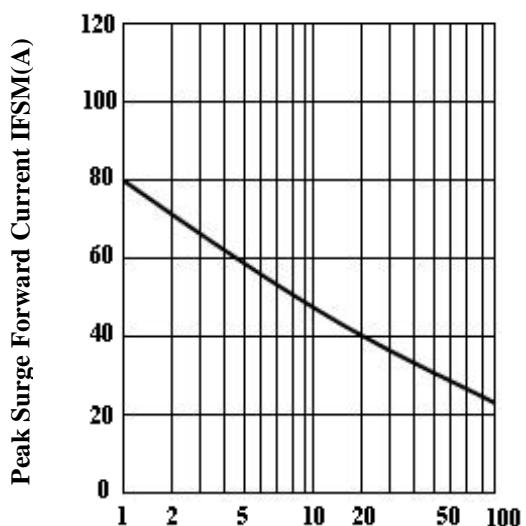
Percent of Rated Peak Reverse Voltage%

**Fig.3 Forward Voltage**



Forward Voltage V<sub>F</sub> (V)

**Fig.4 Peak Surge Forward capability**



Number of Cycles at 60 Hz(cycles)