



# RABS12-RABS10

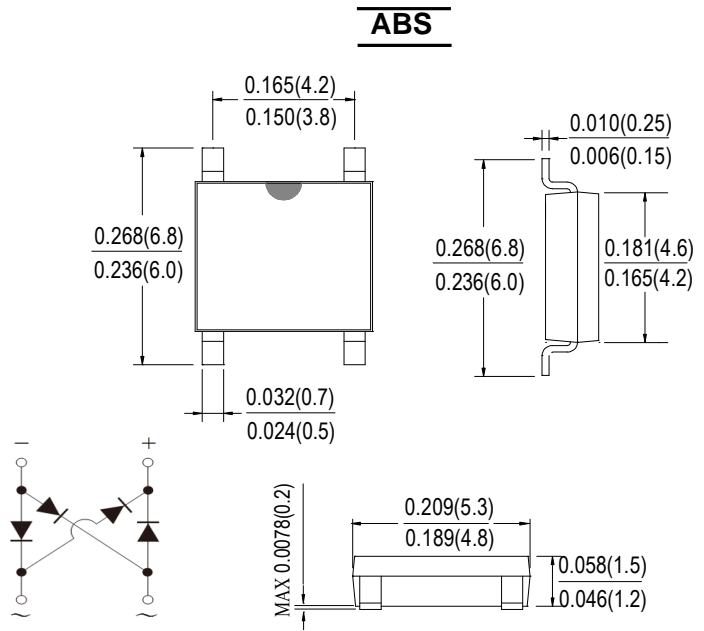
## SURFACE MOUNT FAST RECOVERY BRIDGE RECTIFIERS

### Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0
- UL Recognized File # E476623

### Mechanical Data

- Case: SOPA-4, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	RABS2	RABS4	RABS6	RABS8	RABS10	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$	200	400	600	800	1000	V
	$V_{RWM}$						
	$V_{DC}$						
RMS Reverse Voltage	$V_{RMS}$	140	280	420	560	700	V
Average Rectified Output Current @ $T_c = 100^\circ\text{C}$	$I_F(AV)$	1.2					A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	40					A
Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2t$	14.94					$\text{A}^2 \text{s}$
Forward Voltage per element @ $I_F = 2.0\text{A}$	$V_{FM}$	1.3					V
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	500					ns
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	$I_R$	5.0 50					$\mu\text{A}$
Typical Thermal Resistance per leg	$R_{\theta JA}$	72					$^\circ\text{C/W}$
	$R_{\theta JL}$	20					
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55to+150					$^\circ\text{C}$

Note: 1.Reverse Recovery Test Conditions: $I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{RR} = 0.25\text{A}$ .

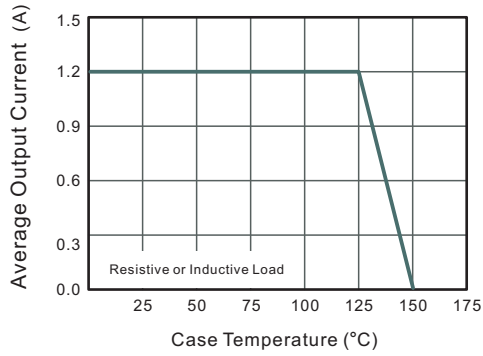


# RABS12-RABS10

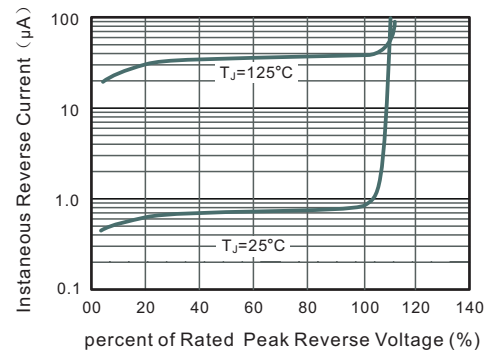
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### Characteristic Curves ( $T_A=25\text{ }^\circ\text{C}$ unless otherwise noted)

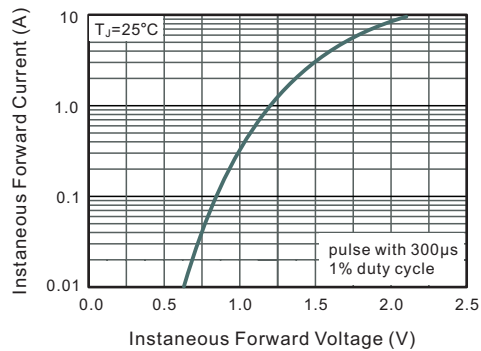
**Fig.1 Forward Current Derating Curve**



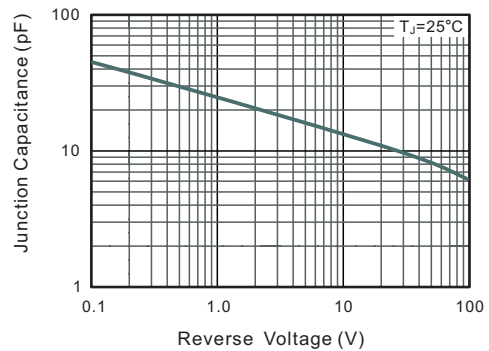
**Fig.2 Typical Reverse Characteristics**



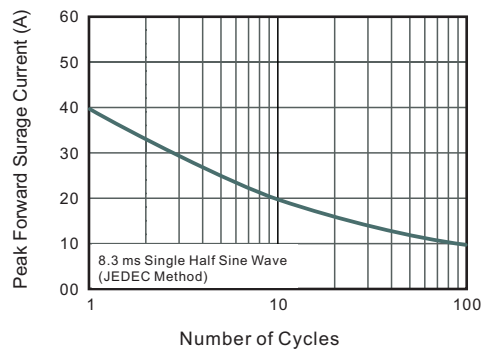
**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**ABS PAD LAYOUT**

