



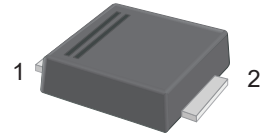
# RS3ABF-PJ~RS3MBF-PJ

## Surface Mount Fast Recovery Rectifiers

### Features

- For surface mount applications
- Glass passivated chip junction
- Fast reverse recovery time

### SMBF



1.Cathode  2.Anode

### Marking Code:

RS3ABF-PJ: R3AB  
 RS3BBF-PJ: R3BB  
 RS3DBF-PJ: R3DB  
 RS3GBF-PJ: R3GB  
 RS3JBF-PJ: R3JB  
 RS3KBF-PJ: R3KB  
 RS3MBF-PJ: R3MB

### Absolute Maximum Ratings and Characteristics

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

Parameter	Symbols	RS3ABF -PJ	RS3BBF -PJ	RS3DBF -PJ	RS2GBF -PJ	RS3JBF -PJ	RS3KBF -PJ	RS3MBF -PJ	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_C = 125^\circ\text{C}$	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	80							A
Maximum Instantaneous Forward Voltage at 3 A	$V_F$	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	$I_R$	5 100							$\mu\text{A}$
Typical Junction Capacitance <sup>Note1</sup>	$C_j$	40							pF
Typical Thermal Resistance <sup>Note2</sup>	$R_{\theta JA}$ $R_{\theta JC}$	45 15							$^\circ\text{C/W}$
Maximum Reverse Recovery Time <sup>Note3</sup>	$T_{rr}$	150				250	500		nS
Junction Temperature	$T_J$	150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

### Note:

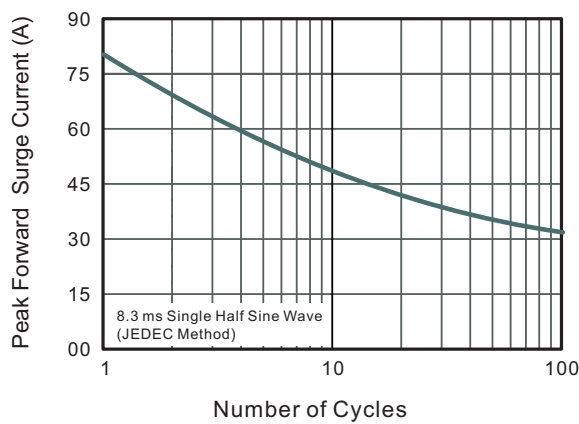
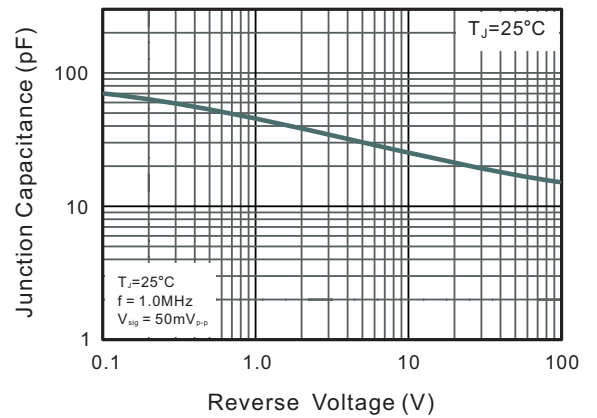
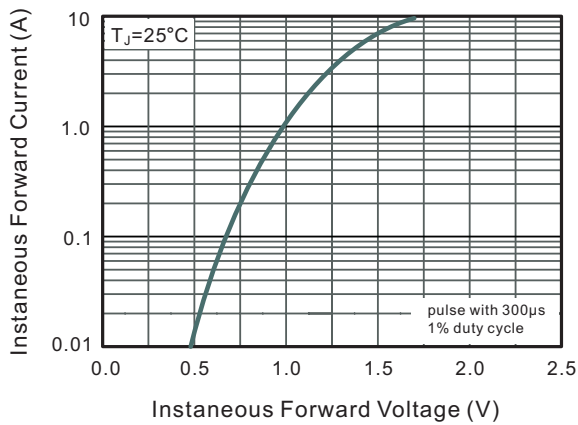
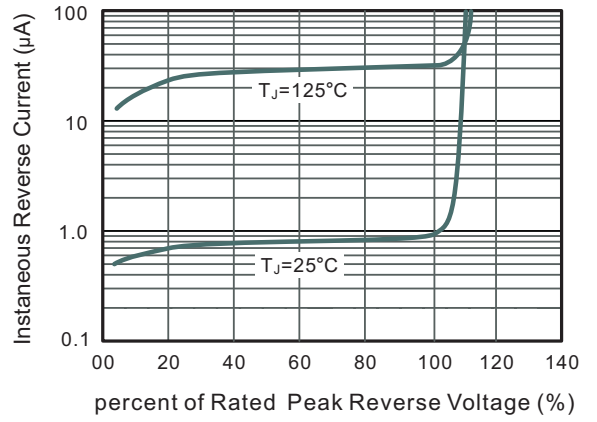
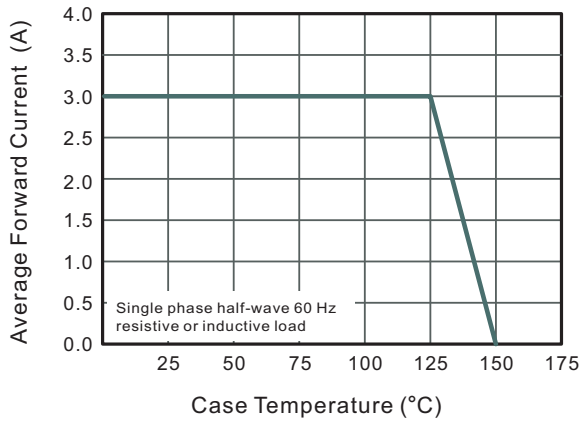
1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.
3. Measured with  $I_F = 0.5\text{ A}$ ,  $I_R = 1\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$



# RS3ABF-PJ~RS3MBF-PJ

## Surface Mount Fast Recovery Rectifiers

### Typical Characteristic Curves





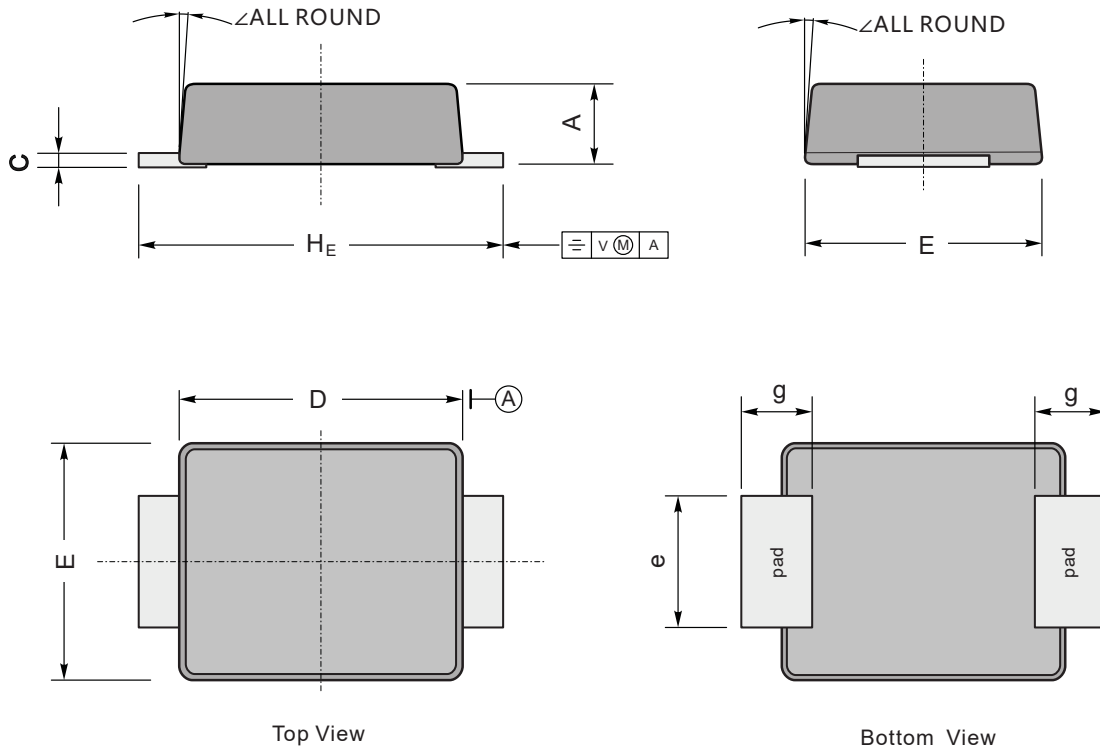
# RS3ABF-PJ~RS3MBF-PJ

## Surface Mount Fast Recovery Rectifiers

### Package Outline

SMBF

Dimensions in mm



UNIT		A	C	D	E	$H_E$	e	g	$\angle$
mm	max	1.3	0.26	4.4	3.7	5.5	2.2	1.0	9°
	min	1.1	0.18	4.2	3.5	5.1	1.9		
mil	max	51	10	173	146	216	86	40	
	min	43	7	165	138	200	75		