

Features

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

SMBF



1.Cathode  2.Anode

Marking Code:

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

Absolute Maximum Ratings and Characteristics

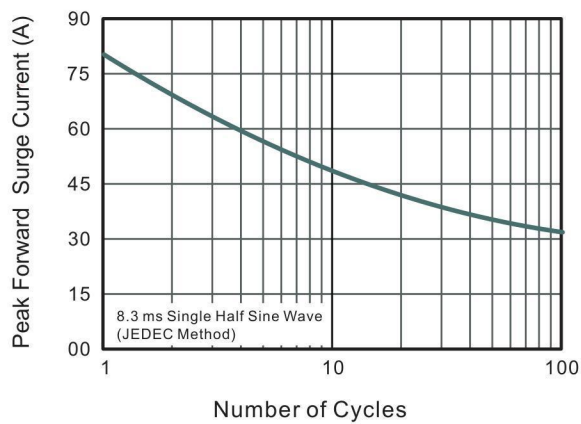
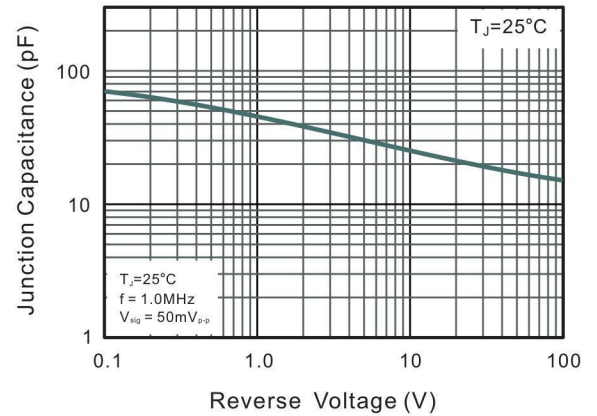
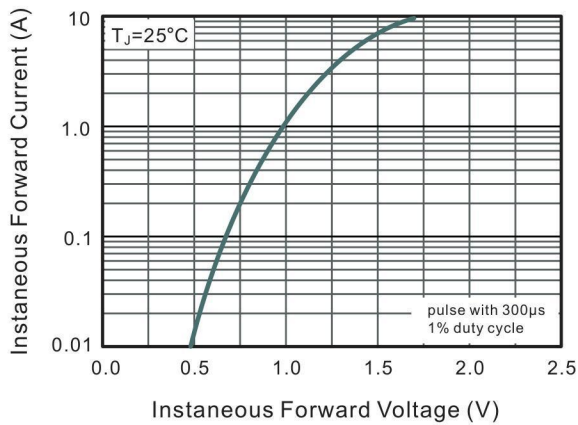
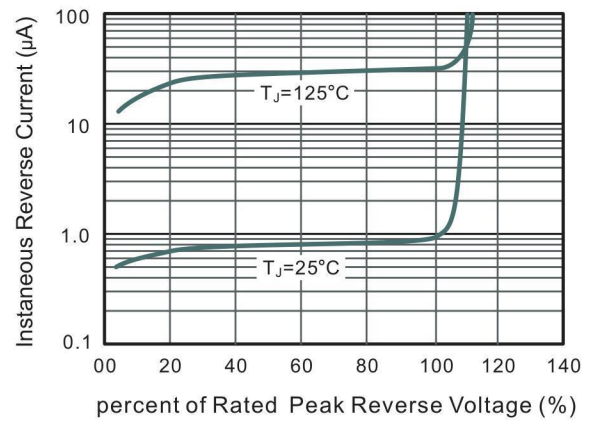
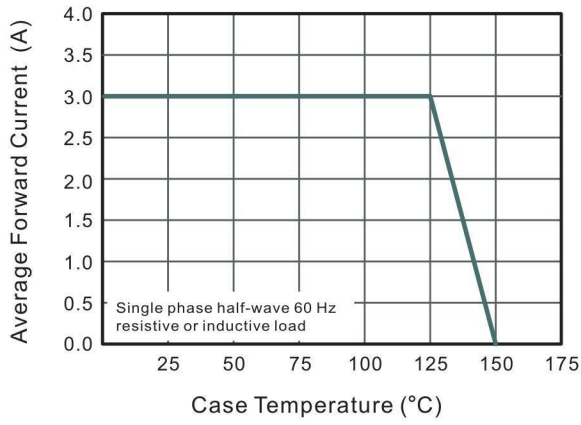
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	RS3ABF –TN	RS3BBF –TN	RS3DBF –TN	RS2GBF –TN	RS3JBF –TN	RS3KBF –TN	RS3MBF –TN	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°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 °C T _A = 125 °C	I _R	5 100							μA
Typical Junction Capacitance ^{Note1}	C _j	40							pF
Typical Thermal Resistance ^{Note2}	R _{θJA} R _{θJC}	45 15							°C/W
Maximum Reverse Recovery Time ^{Note3}	T _{rr}	150				250	500		nS
Junction Temperature	T _J	150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°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 $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $t_{rr} = 0.25\text{ A}$

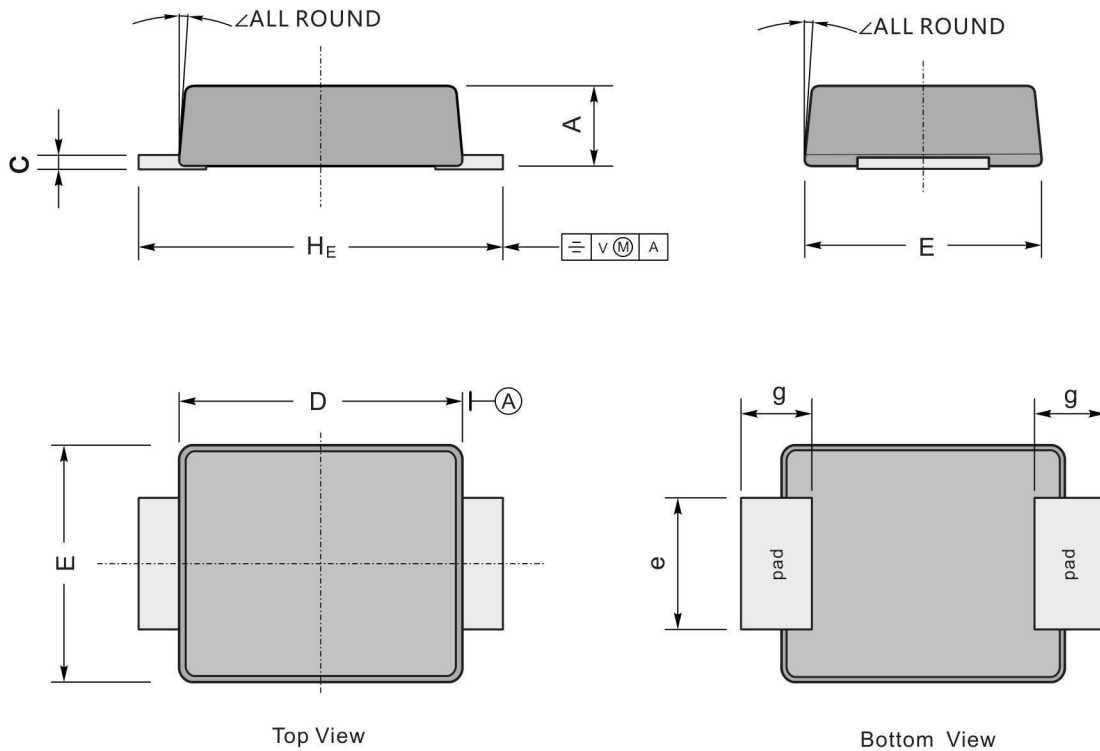
Typical Characteristic Curves



Package Outline

SMBF

Dimensions in mm



UNIT		A	C	D	E	H _E	e	g	∠
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		