

Features

- For surface mount applications
- Glass passivated chip junction
- Low profile package
- Easy to pick and place
- Superfast reverse recovery time

SMBF



1.Cathode  2.Anode

Marking Code:

US5ABF-TN: U5AB
US5BBF-TN: U5BB
US5DBF-TN: U5DB
US5GBF-TN: U5GB
US5JBF-TN: U5JB
US5KBF-TN: U5KB
US5MBF-TN: U5MB

Maximum Ratings and Electrical Characteristics

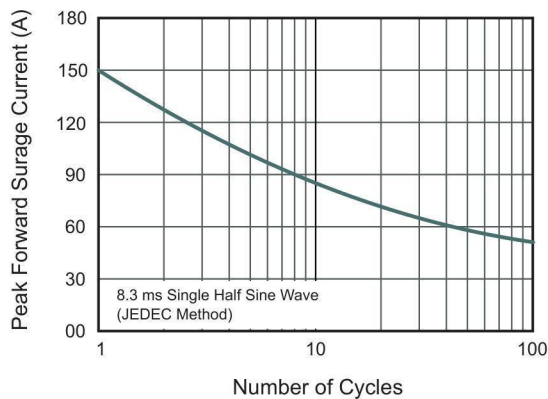
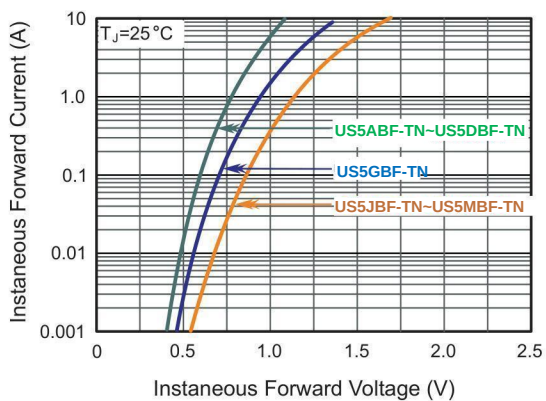
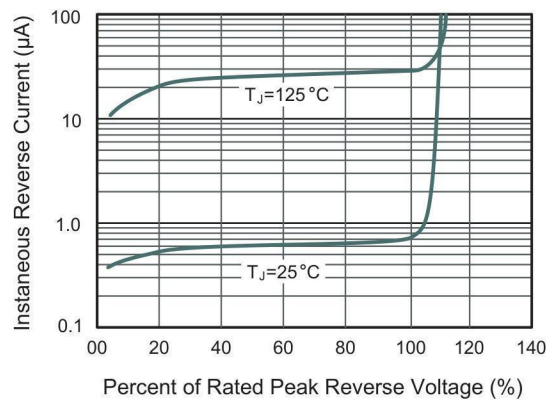
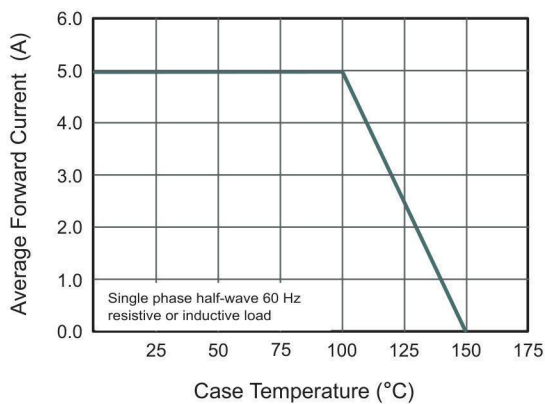
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	US5ABF -TN	US5BBF -TN	US5DBF -TN	US5GBF -TN	US5JBF -TN	US5KBF -TN	US5MBF -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 =100 °C	I _{F(AV)}	5.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	150							A
Maximum Instantaneous Forward Voltage at 5 A	V _F	1.0			1.3	1.68			V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _A = 25 °C T _A = 125 °C	I _R	10 150							μA
Typical Thermal Resistance ^{Note1}	R _{θJA} R _{θJC}	40 12							°C/W
Maximum Reverse Recovery Time ^{Note2}	T _{rr}	50				75			nS
Junction Temperature	T _J	150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

Note:

1. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.
2. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$.

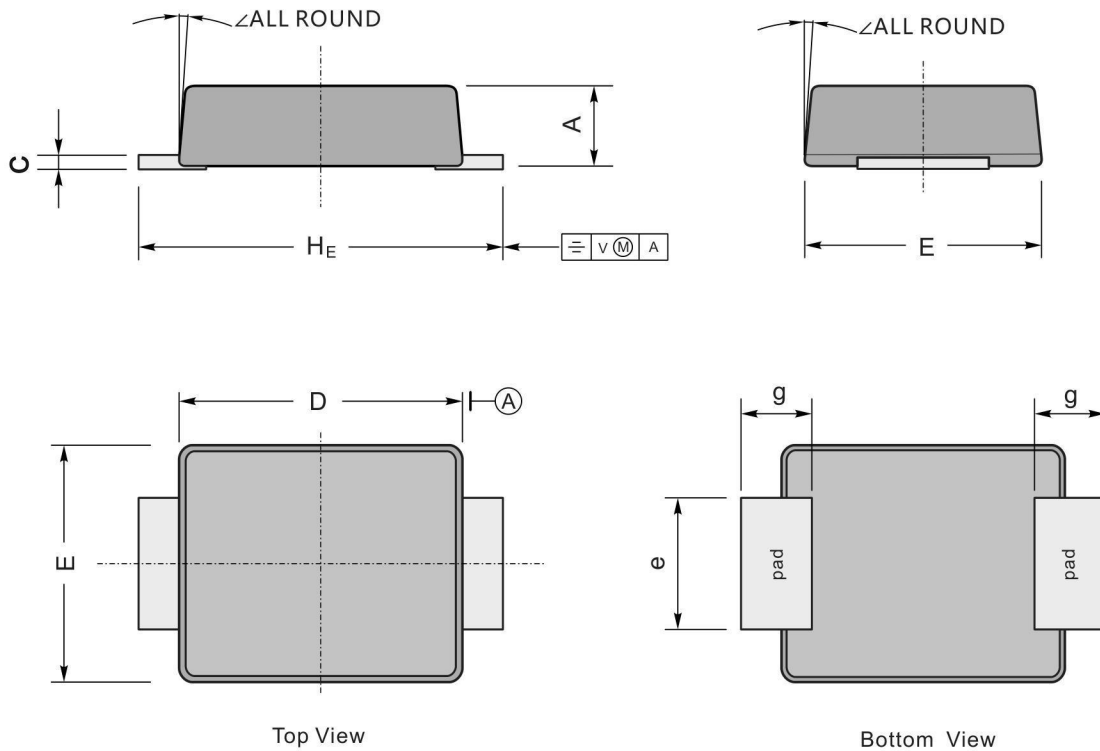
Typical Characteristic Curves



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		