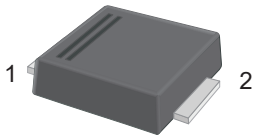
S1ABF-PJ~S1MBF-PJ

Surface Mount General Purpose Silicon Rectifiers

Features

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

SMBF



1.Cathode — 2.Anode

Marking Code:

S1ABF-PJ: S1AB
S1BBF-PJ: S1BB
S1DBF-PJ: S1DB
S1GBF-PJ: S1GB
S1JBF-PJ: S1JB
S1KBF-PJ: S1KB
S1MBF-PJ: S1MB

Maximum Ratings and Electrical Characteristics

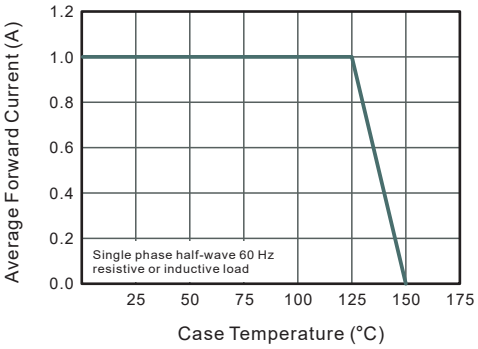
Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

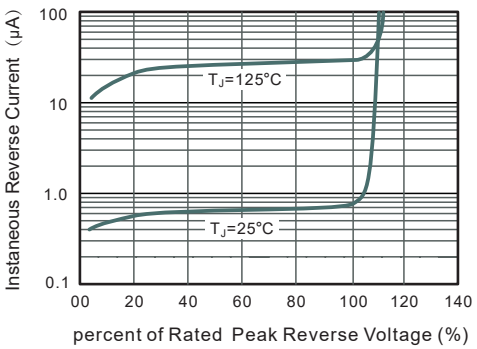
Parameter	Symbols	S1ABF-PJ	S1BBF-PJ	S1DBF-PJ	S1GBF-PJ	S1JBF-PJ	S1KBF-PJ	S1MBF-PJ	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_C =125°C	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1 A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A = 25 °C T_A = 125 °C	I_R	5 50							μA
Typical Junction Capacitance Note1	C_j	15							pF
Typical Thermal Resistance Note2	$R_{\theta JA}$	75							°C/W
Junction Temperature	T_J	150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

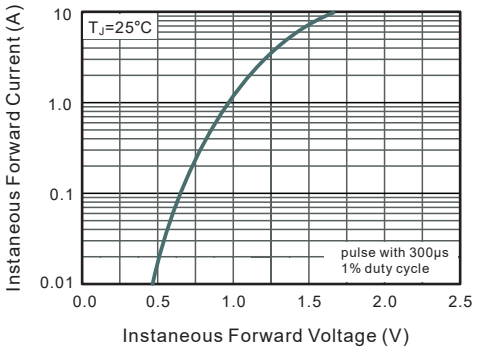
Note:

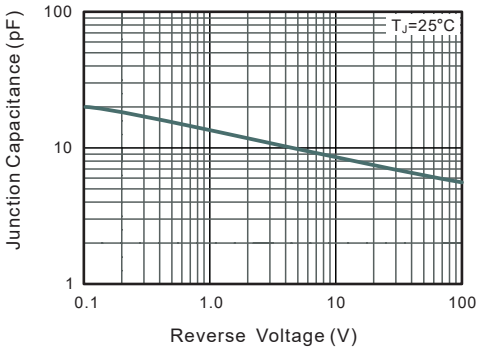
1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

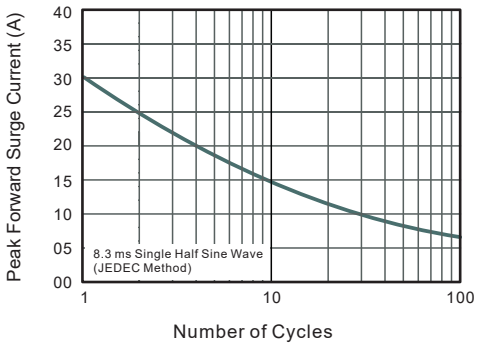
Typical Characteristic Curves







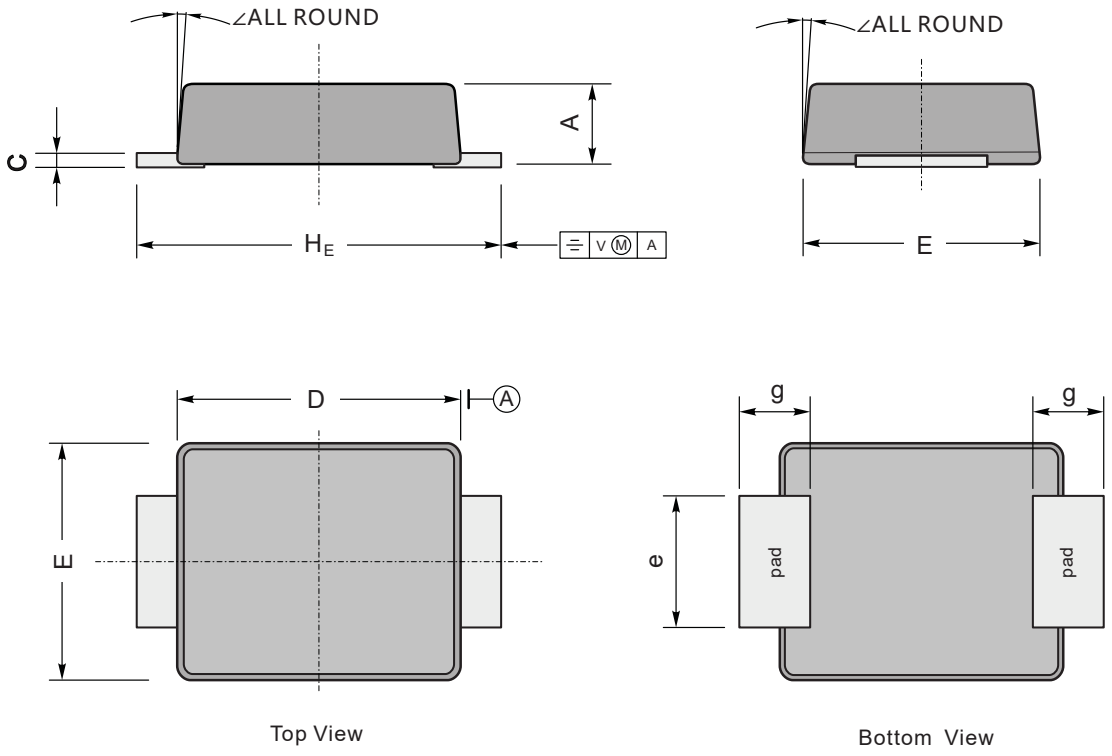




Package Outline

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		