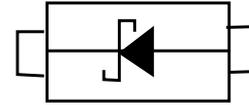


Feature

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications


Mechanical Characteristics

- Case: SMAF
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg 0.00086oz

Absolute maximum rating@25°C

Parameter	Symbol	PSBDA F20V2	PSBDA F40V2	PSBDA F60V2	PSBDA F80V2	PSBDA F100V2	PSBDA F120V2	PSBDA F150V2	PSBDA F200V2	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V_{CC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50				40				A
Max Instantaneous Forward Voltage at 2 A	V_F	0.55		0.70		0.85		0.95		V

Absolute maximum rating@25°C

Parameter	Symbol	PSBDA F20V2	PSBDA F40V2	PSBDA F60V2	PSBDA F80V2	PSBDA F100V2	PSBDA F120V2	PSBDA F150V2	PSBDA F200V2	Units
Maximum DC Reverse Current Ta = 25°C at Rated DC Reverse Voltage Ta =100°C	IR		0.5 10					0.3 5		mA
Typical Junction Capacitance 1)	Cj	220				80				pF
Operating Junction Temperature Range	Tj					-55~+125				°C
Storage Temperature Range	Tstg					-55~+150				°C

Typical Characteristics

Fig.1 Forward Current Derating Curve

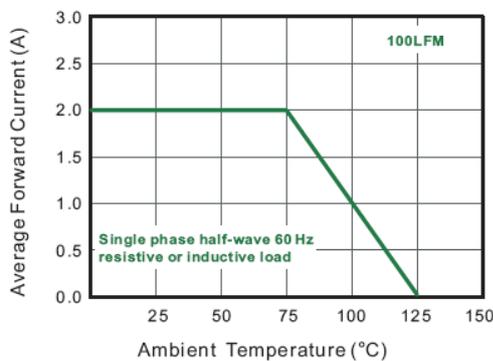


Fig.2 Typical Reverse Characteristics

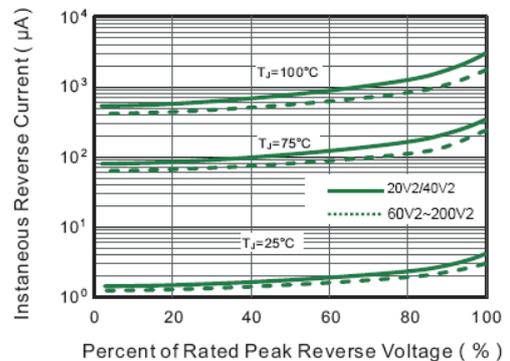


Fig.3 Typical Forward Characteristic

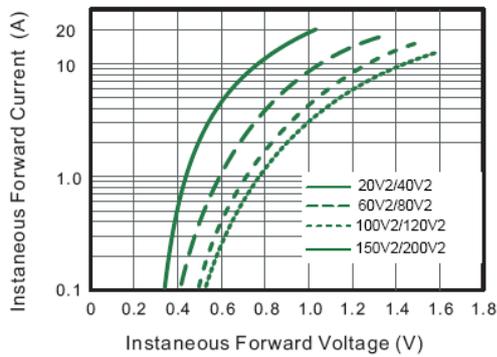


Fig.4 Typical Junction Capacitance

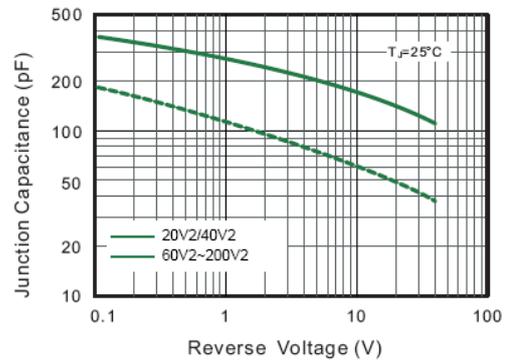
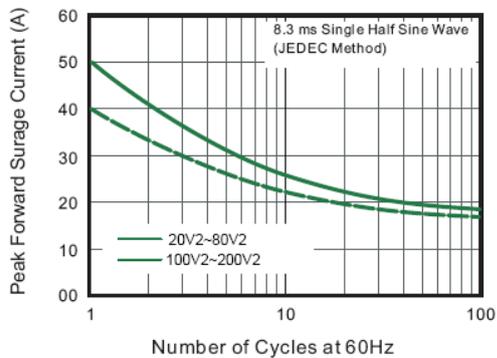
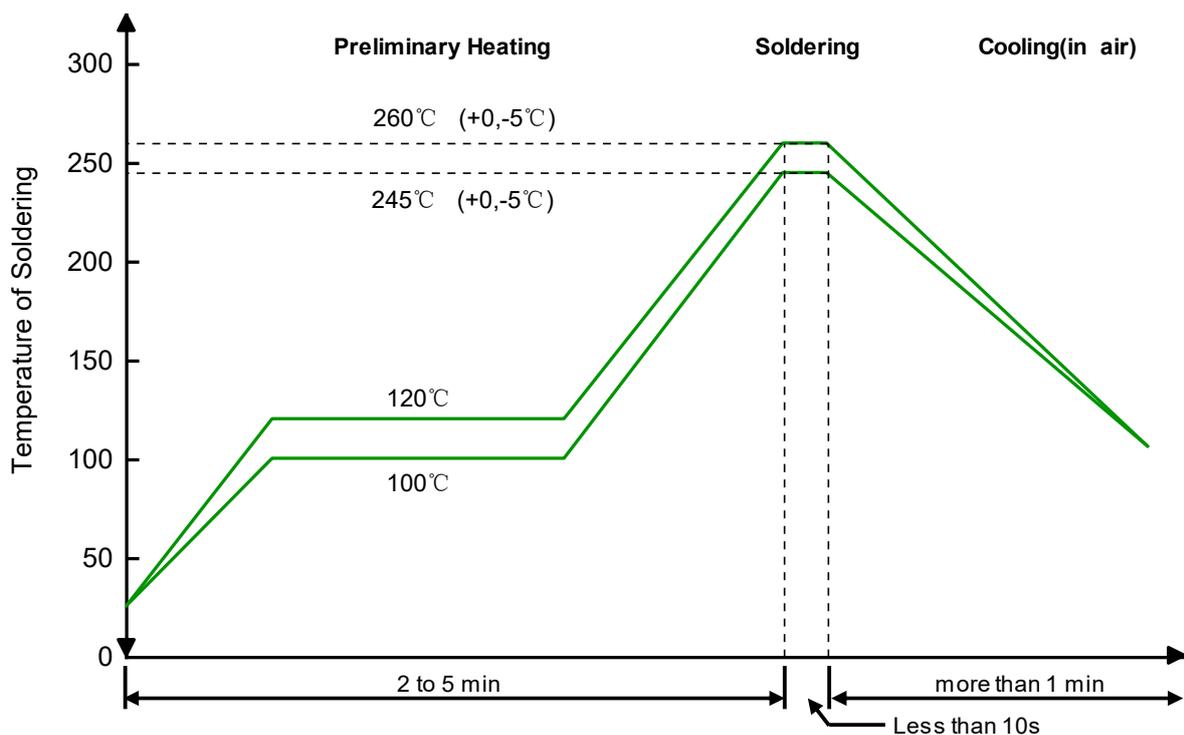


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

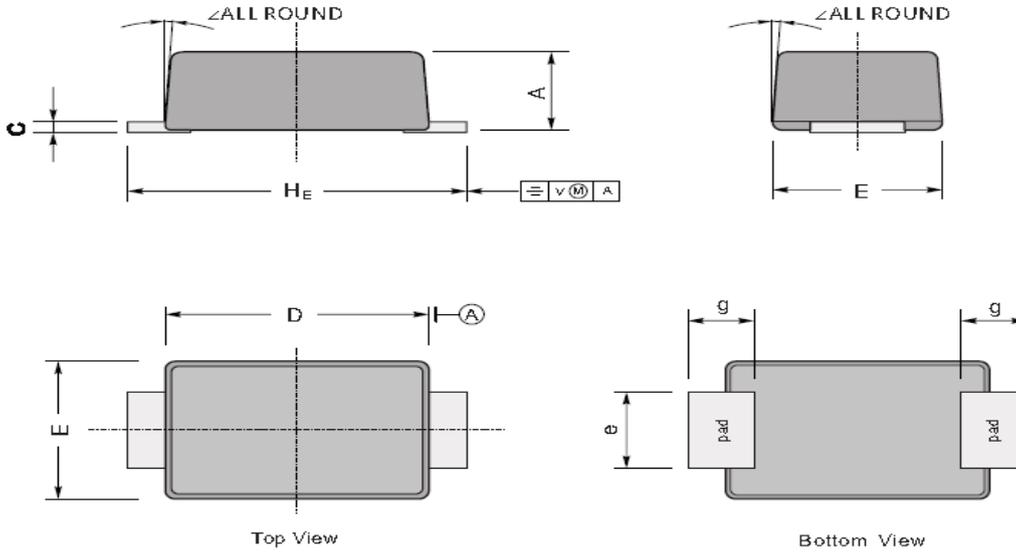


Solder Reflow Recommendation



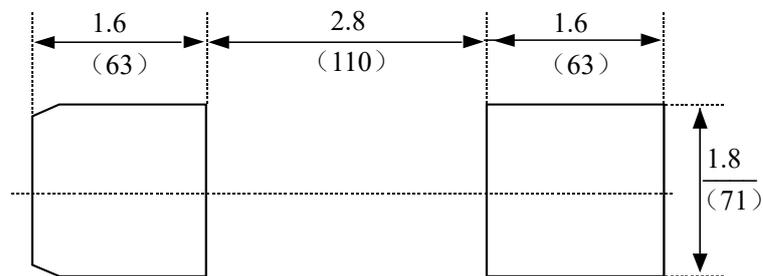
Remark: Pb free for 260°C; Pb for 245°C.

Product dimension (SMAF)



UNIT		A	C	D	E	e	g	HE	∠
mm	max	1.3	0.23	3.7	2.7	1.6	1.3	4.9	7°
	min	0.9	0.18	3.3	2.4	1.3	1.0	4.4	
mil	max	51	9.1	146	106	63	51	193	
	min	35	7.1	130	94	51	39	173	

The recommended mounting pad size



Unit: $\frac{\text{mm}}{\text{mil}}$

Ordering information

Device	Package	Shipping
PSBDAFXXXV2	SMAF (Pb-Free)	3000/ Tape & Reel

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