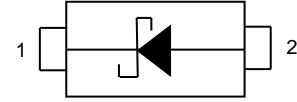


Feature

- 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

- Lead finish: 100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature: 260°C
- Device meets MSL 1 requirements
- Pure tin plating: 7 ~ 17 um

Absolute maximum rating @25°C

Parameter	Symbol	PSBDA 20V2	PSBDA 40V2	PSBDA 60V2	PSBDA 80V2	PSBDA 100V2	PSBDA 120V2	PSBDA 150V2	PSBDA 200V2	Unit
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								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 20V2	PSBDA 40V2	PSBDA 60V2	PSBDA 80V2	PSBDA 100V2	PSBDA 120V2	PSBDA 150V2	PSBDA 200V2	Units
Maximum DC Reverse Current Ta = 25°C at Rated DC Reverse Voltage Ta =100°C	I _R	0.5 10			0.3 5					mA
Typical Junction Capacitance ⁽¹⁾	C _J	220		80						pF
Typical Junction Resistance ⁽²⁾	R _{θJA}	80								°C/W
Operating Junction Temperature Range	T _J	-55~+125								°C
Storage Temperature Range	T _{STG}	-55~+150								°C

Notes: 1. Measured at 1MHZ and applied reverse voltage of 4V.D.C

2. P.C.B mounted with 2.0"X2.0" (5X5 cm) copper pad areas.

Typical Characteristics

Fig.1 Forward Current Derating Curve

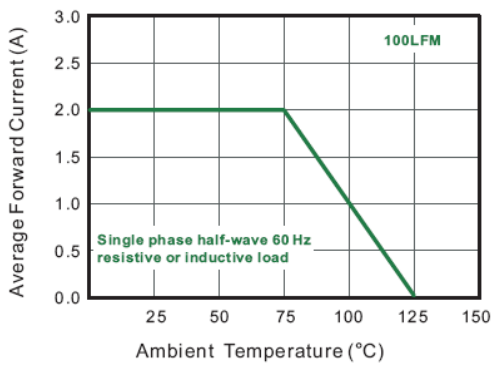


Fig.2 Typical Reverse Characteristics

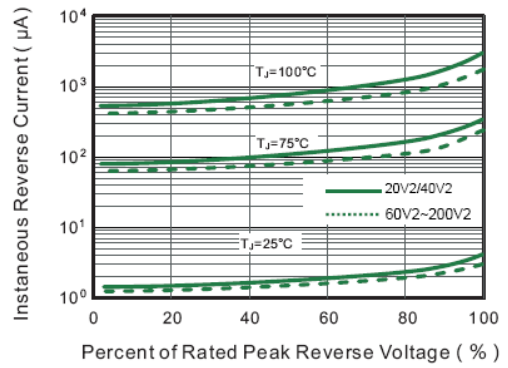


Fig.3 Typical Forward Characteristic

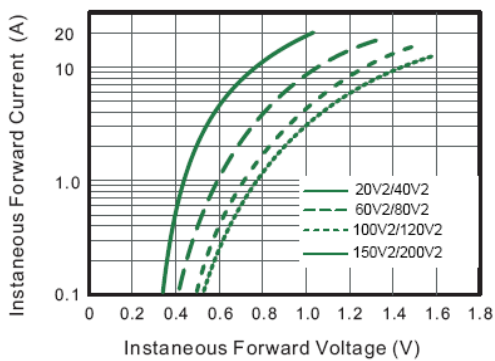


Fig.4 Typical Junction Capacitance

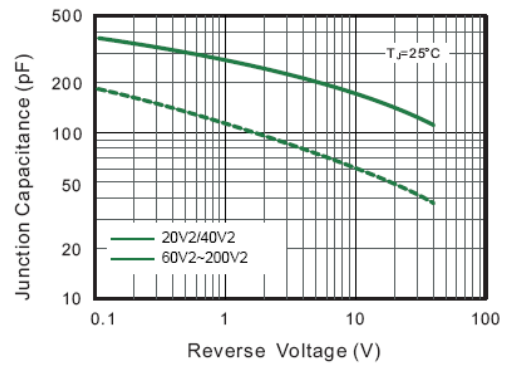
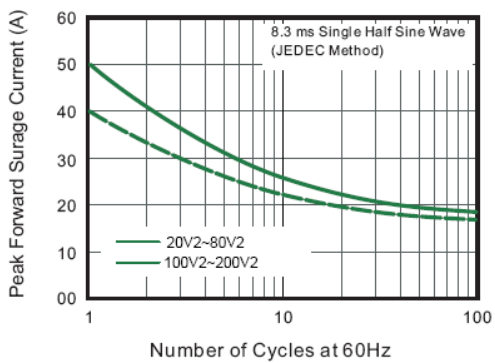
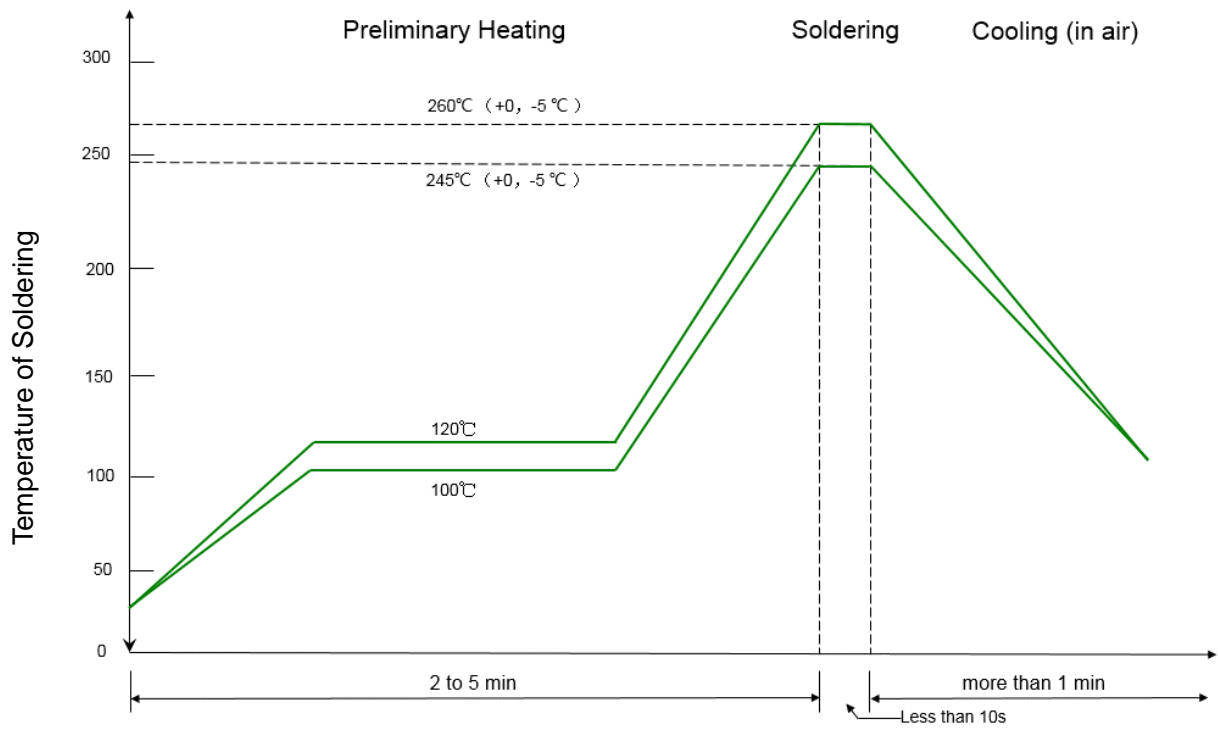


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

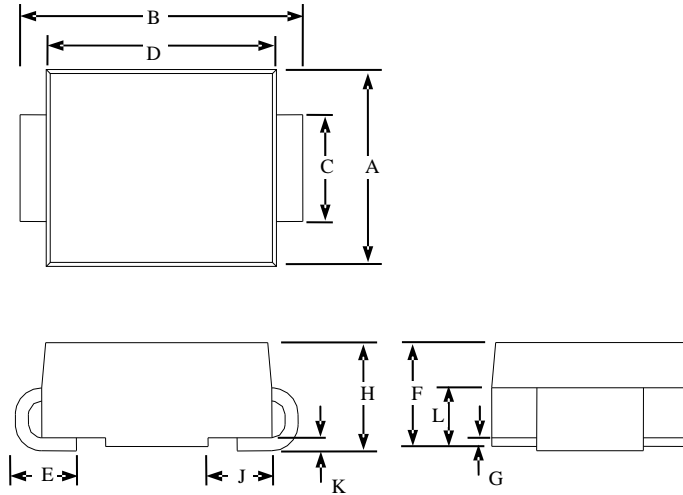


Solder Reflow Recommendation

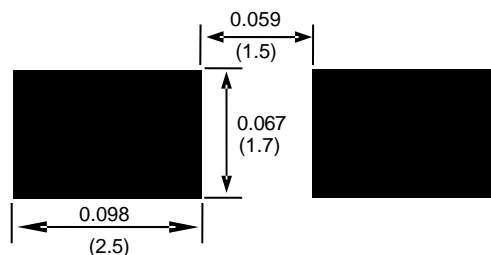


Remark: Pb free for 260°C; Pb for 245°C.

Product dimension(SMA)



Dimension	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.086	0.110	2.18	2.79
B	0.185	0.209	4.70	5.31
C	0.051	0.067	1.29	1.70
D	0.160	0.180	4.06	4.57
E	0.036	0.056	0.91	1.42
F	0.069	0.087	1.75	2.20
G	0.002	0.008	0.05	0.20
H	0.069	0.091	1.75	2.31
J	0.035	0.053	0.89	1.35
K	0.008	0.014	0.20	0.35
L	0.039	0.049	0.99	1.24




Suggested PCB Layout DIMENSIONS ARE : $\frac{\text{INCHES}}{\text{(Millimeters)}}$

Ordering information

Device	Package	Reel	MPQ
PSBDAXXXV2	SMA(Pb-Free)	13"	5000/ Tape & Reel


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