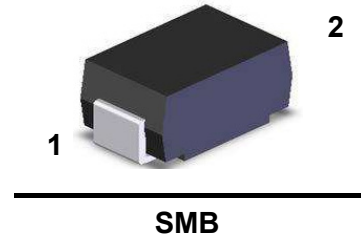


3A Schottky Rectifier

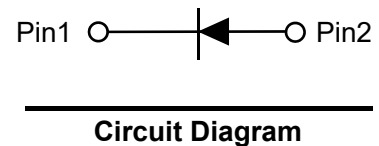
Feature

- 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: SMB
- Terminals: Solderable per MIL-STD-750, Method 2026



Maximum Ratings and Thermal Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter		Symbol	PSBDB 20V3	PSBDB 40V3	PSBDB 60V3	PSBDB 80V3	PSBDB 100V3	PSBDB 120V3	PSBDB 150V3	PSBDB 200V3	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 _{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current		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
Max Instantaneous Forward Voltage at 3A		V _F	0.55		0.7	0.85		0.95			V
Reverse Current	T _a = 25°C	I _R	0.5			0.3				mA	
	T _a = 100°C		5.0			3.0					
Typical Junction Capacitance ¹⁾		C _J	450			400				pF	
Typical Thermal Resistance ²⁾		R _{θJA}	60								°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 4 V D.C.
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Typical Characteristics

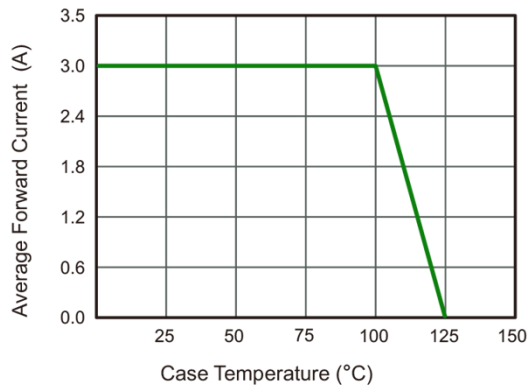


Fig.1 Forward Current Derating Curve

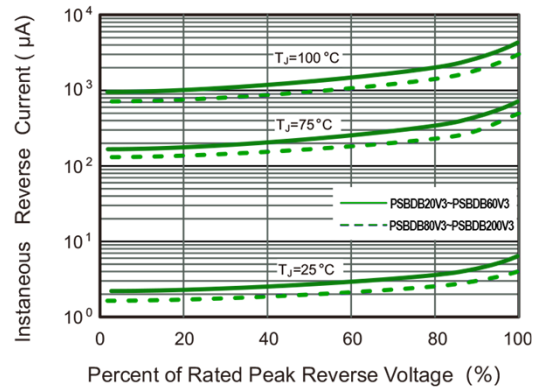


Fig.2 Typical Reverse Characteristics

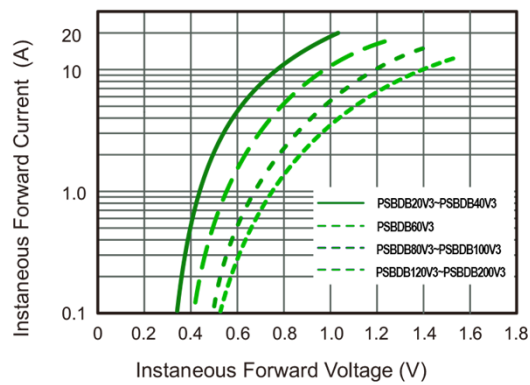


Fig.3 Typical Forward Characteristic

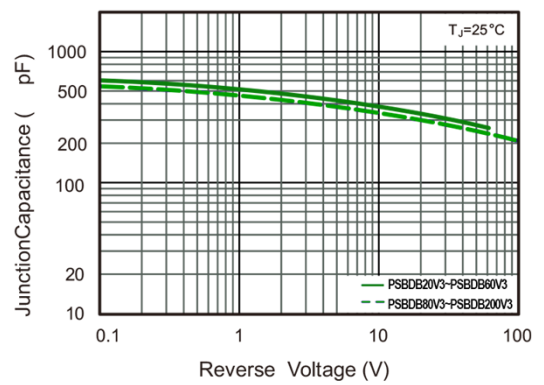


Fig.4 Typical Junction Capacitance

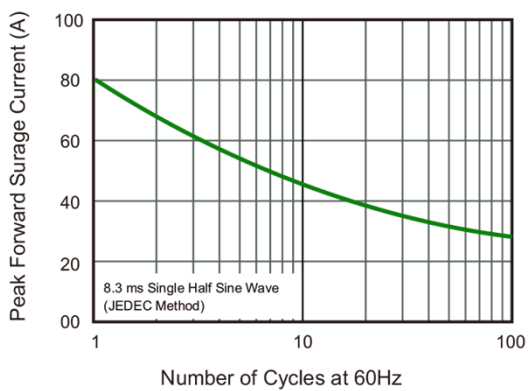
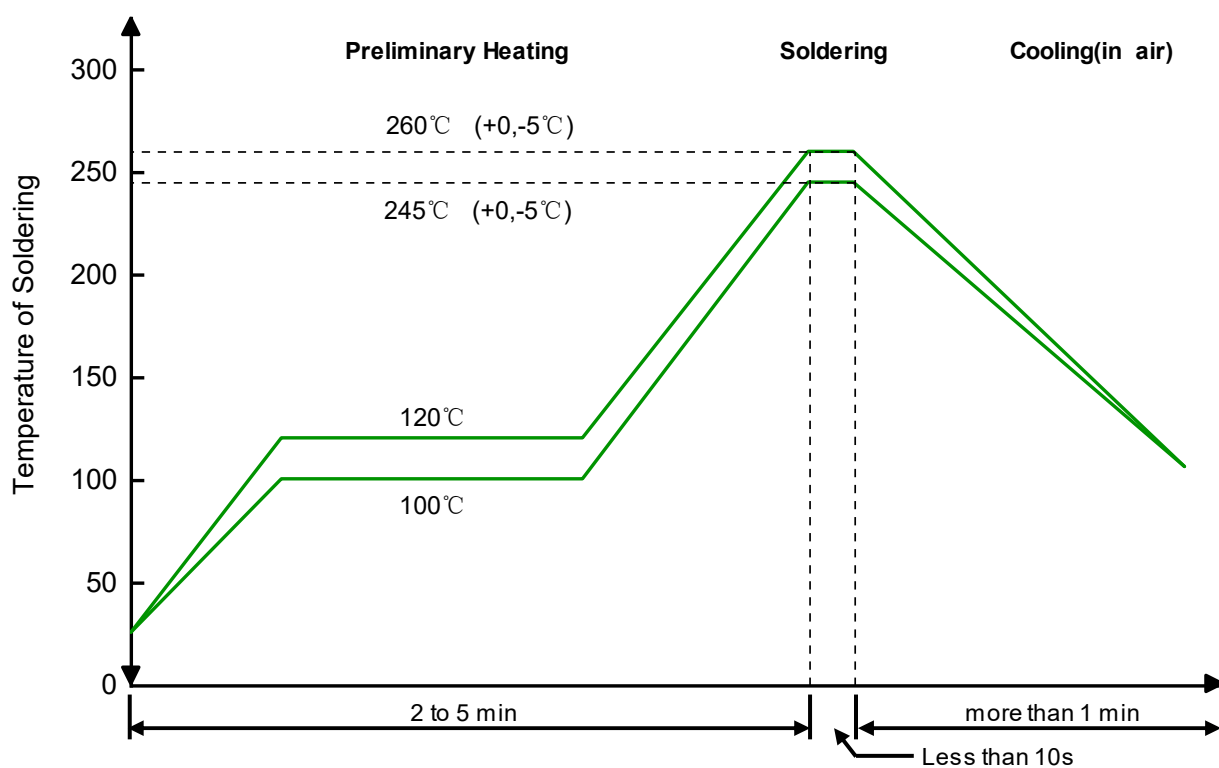


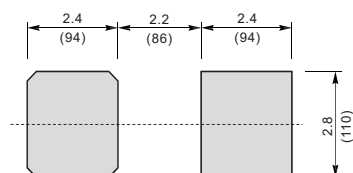
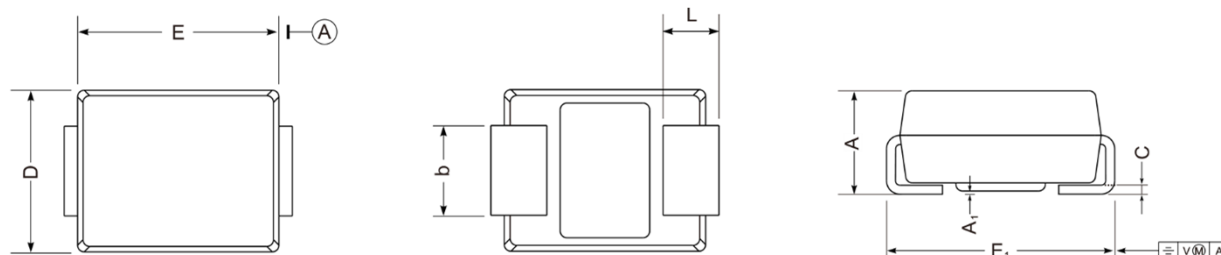
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

Solder Reflow Recommendation



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

Product Dimension (SMB)



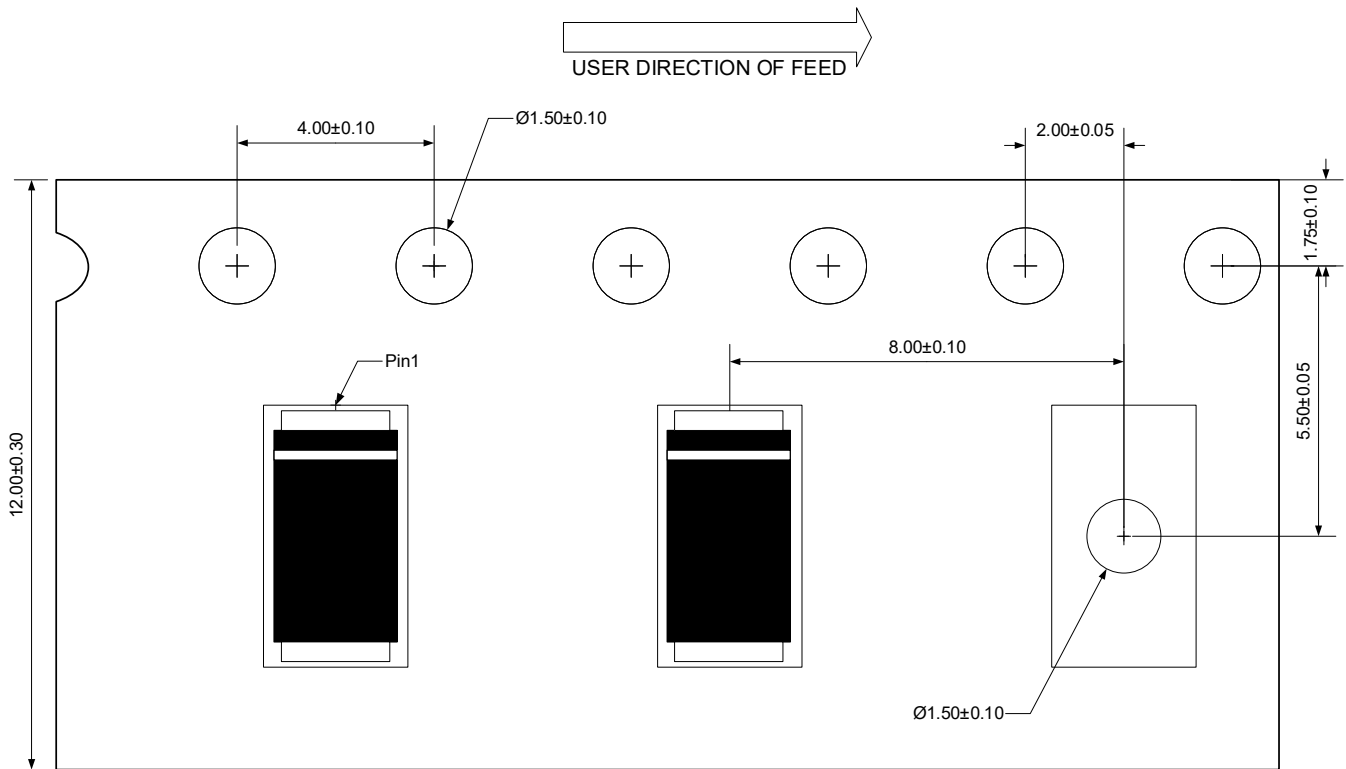
Suggested PCB Layout

Unit: mm

Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	2.13	2.44	0.084	0.096
E	4.06	4.70	0.160	0.185
D	3.30	3.94	0.130	0.155
E ₁	5.08	5.59	0.200	0.220
A ₁	0.05	0.20	0.002	0.008
L	0.80	1.50	0.031	0.059
C	0.152	0.305	0.006	0.012
b	1.90	2.20	0.075	0.087

3A Schottky Rectifier

Load with information

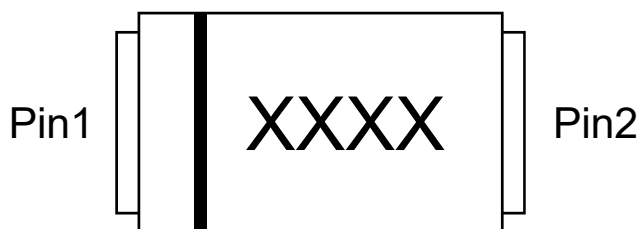


Unit:mm

Ordering information

Package	Reel	Shipping
SMB	13"	3000 / Tape & Reel


Marking Information



Note: Detailed Marking See table right

Type Number	Marking Code
PSBDB20V3	SS32
PSBDB40V3	SS34
PSBDB60V3	SS36
PSBDB80V3	SS38
PSBDB100V3	SS310
PSBDB120V3	SS312
PSBDB150V3	SS315
PSBDB200V3	SS320


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