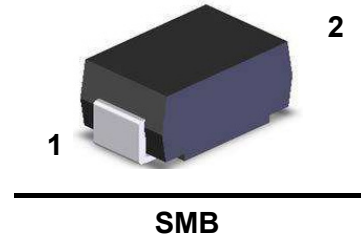
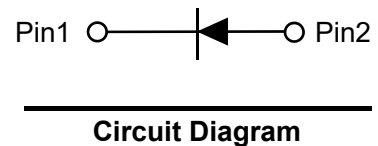


5A Schottky Rectifier
Feature

- 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
- Approx. Weight: 0.1g / 0.0034oz


Maximum Ratings and Thermal Characteristics (T_A=25°C unless otherwise noted)

Parameter		Symbol	PSBDB 20V5	PSBDB 40V5	PSBDB 60V5	PSBDB 80V5	PSBDB 100V5	PSBDB 120V5	PSBDB 150V5	PSBDB 200V5	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)}	5.0								A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load		I _{FSM}	150								A
Max Instantaneous Forward Voltage at 5 A		V _F	0.55		0.7	0.85				V	
Reverse Current	T _a = 25°C	I _R	1.0		0.3				mA		
	T _a = 100°C		50		25						
Typical Junction Capacitance ¹⁾		C _J	500		300				pF		
Typical Thermal Resistance ²⁾		R _{θJA}	50								°C/W
Operating Junction Temperature Range		T _J	-55 ~ +150								°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

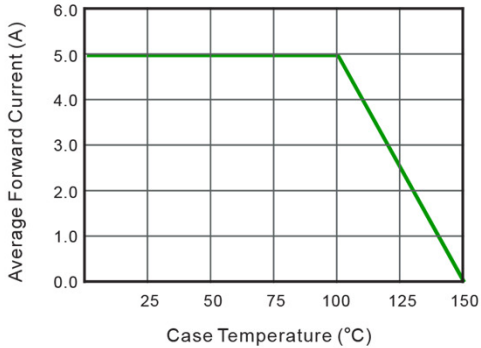


Fig.1 Forward Current Derating Curve

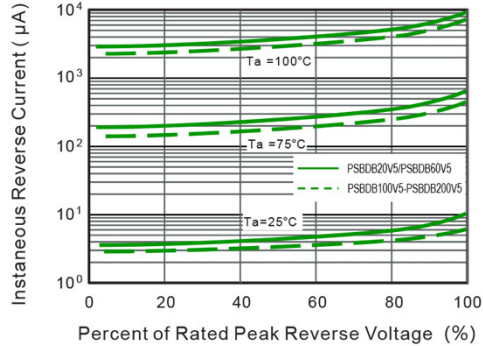


Fig.2 Typical Reverse Characteristics

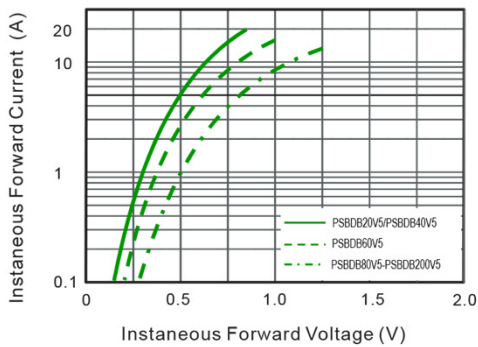


Fig.3 Typical Forward Characteristic

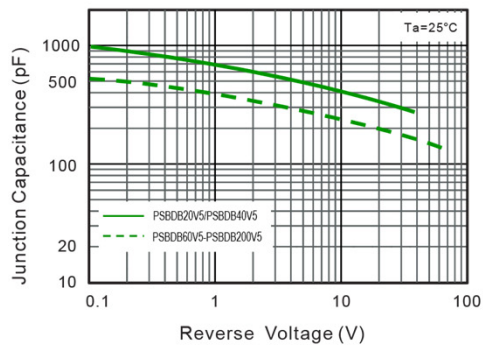


Fig.4 Typical Junction Capacitance

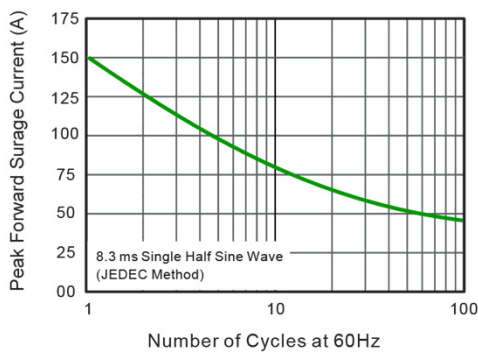


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

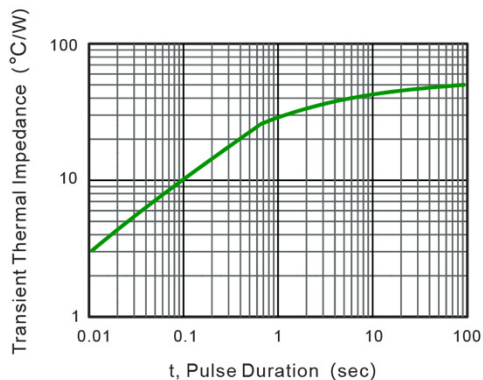
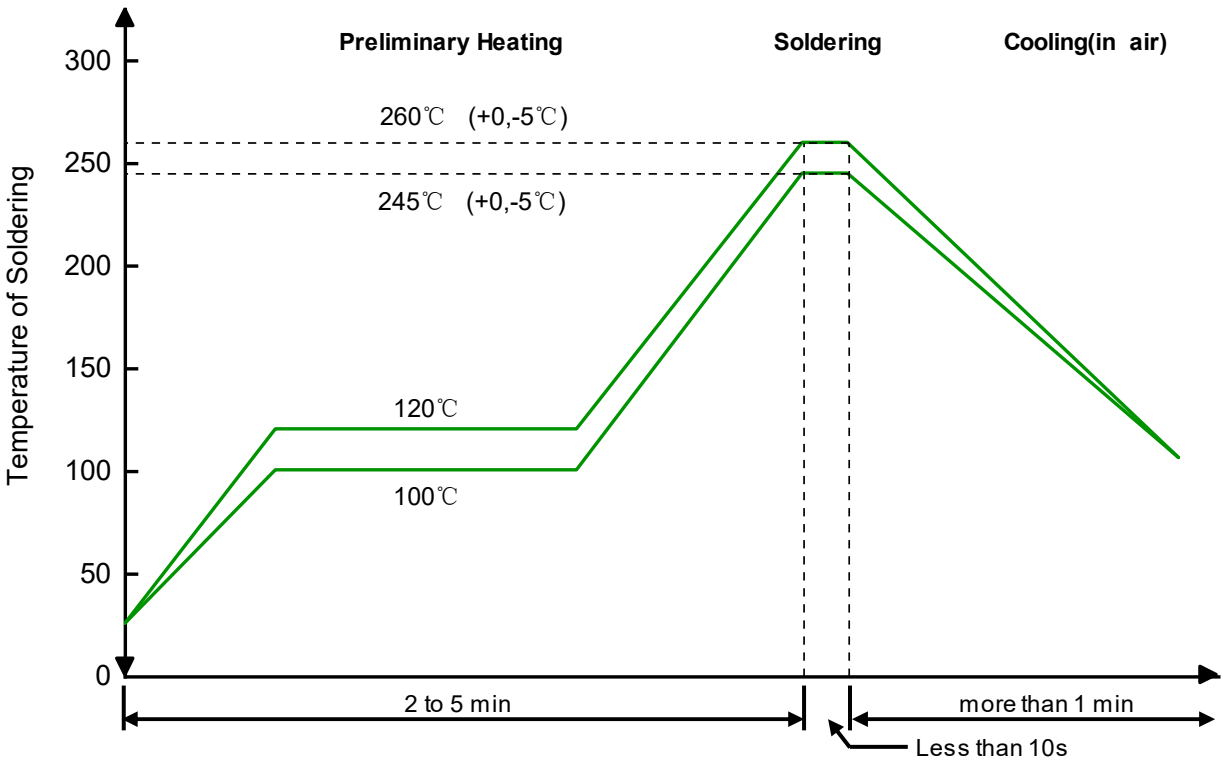


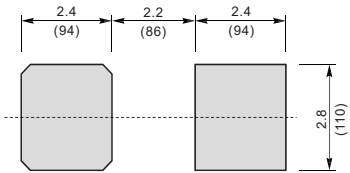
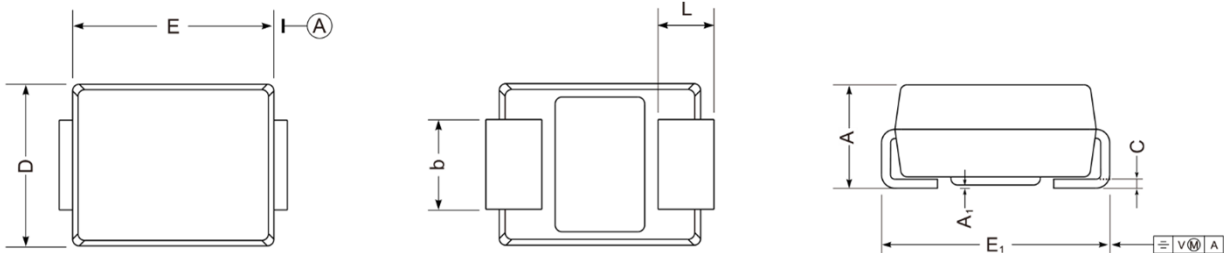
Fig.6- Typical Transient Thermal Impedance

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


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