

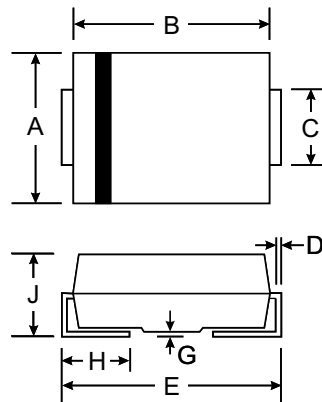
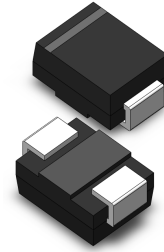
VOLTAGE RANGE: 600V
CURRENT: 3.0 A

Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- Controlled avalanche characteristics
- Low leakage current
- High forward surge capability

Mechanical Data

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)



SMB(DO-214AA)		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.70
C	1.91	2.21
D	0.15	0.31
E	5.00	5.59
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	AS3BJ	Unit
	Marking	A3J	
Maximum repetitive peak reverse voltage	V _{RRM}	600	V
Maximum DC forward current (fig. 1)	I _F ⁽¹⁾	3.0	A
	I _F ⁽²⁾	2.0	
Peak forward surge current 10 ms single half sine-wave, non-repetitive, T _J = 25 °C	I _{FSM}	90	A
Non-repetitive avalanche energy at T _J = 25 °C	I _{AS} = 2.0 A max.	20	mJ
	I _{AS} = 1.0 A typ.	30	
Operating junction and storage temperature range	T _J , T _{STG}	- 55 to + 175	°C

Notes

- (1) Mounted on 14 mm x 14 mm x 2 areas, 1 oz. FR4 PCB
 (2) Free air, mounted on recommended 1.52 mm x 2.18 mm x 2 pad areas

RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

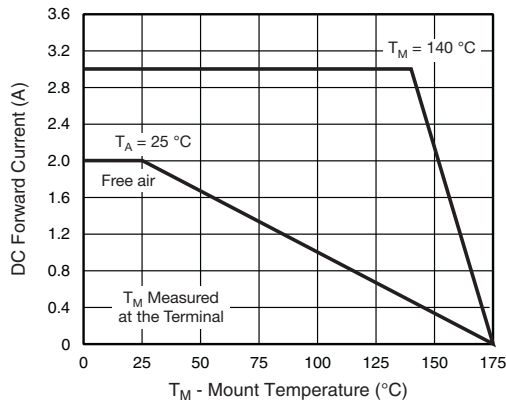


Fig. 1 - Maximum Forward Current Derating Curve

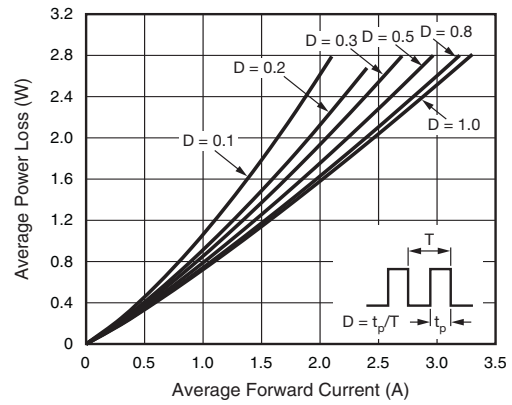


Fig. 2 - Forward Power Loss Characteristics

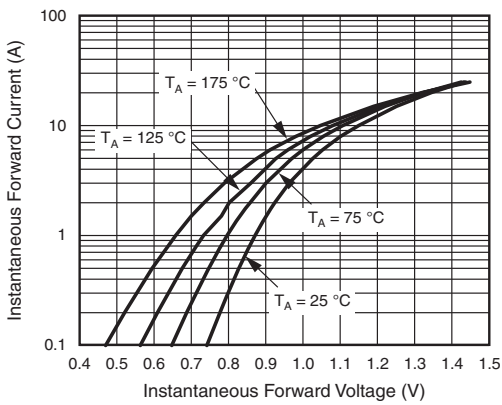


Fig. 3 - Typical Instantaneous Forward Characteristics

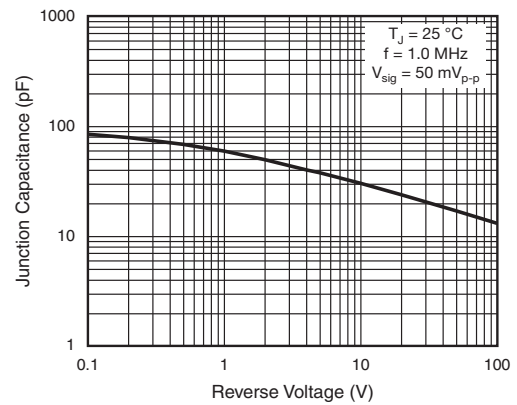


Fig. 5 - Typical Junction Capacitance

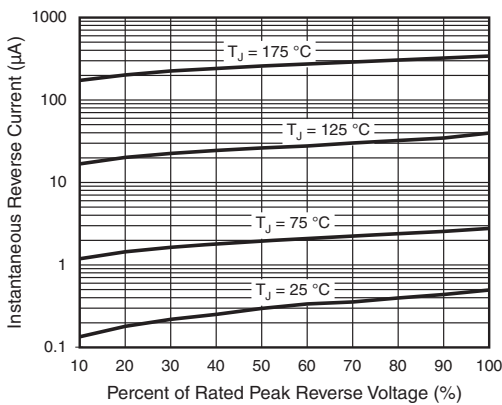


Fig. 4 - Typical Reverse Characteristics

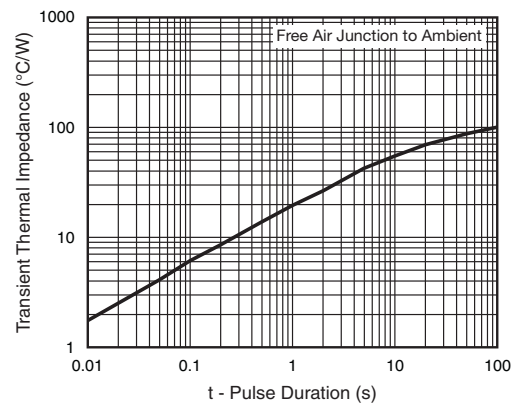


Fig. 6 - Typical Transient Thermal Impedance