



Surface Mount Schottky Barrier Rectifier

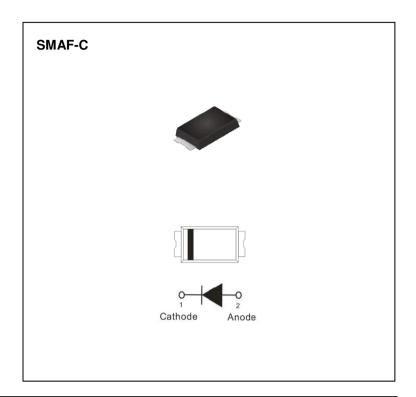
Voltage 20~60 V Current 2 A

Features

- Low power loss, high efficiency
- High surge current capability
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : Molded plastic, SMAF-C
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0012 ounces, 0.034 grams



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

PARAMETER	SYMBOL	SB22AFC	SB23AFC	SB24AFC	SB25AFC	SB26AFC	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	V
Maximum DC Blocking Voltage	VR	20	30	40	50	60	V
Maximum Average Forward Rectified Current	l _{F(AV)}	2				А	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	Іғѕм	50				А	
Instantaneous Forward Voltage at 2A	VF	0.5			.7	V	
Reverse Current ^(Note 3)	I _R	0.1					mA
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 4V$	Сл	98 76			6	pF	
Typical Thermal Resistance (Note 1) (Note 2)	R _{0JL} R _{0JA}	20 150					°C/W
Operating Junction Temperature Range	TJ	-55 to +150					°C
Storage Temperature Range	T _{STG}	-55 to +150				°C	

NOTES

- 1. Mounted on 48cm² copper pad area
- $2. \ \ \text{Mounted on a FR4 PCB, single-sided copper, standard footprint}$
- 3. Short duration pulse test used to minimize self-heating effect





TYPICAL CHARACTERISTIC CURVES

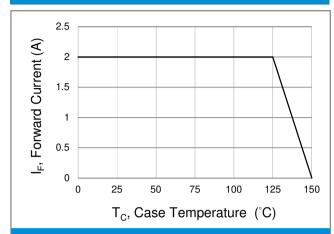


Fig.1 Forward Current Derating Curve

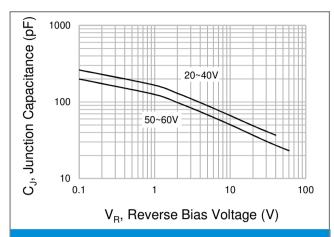


Fig.2 Typical Junction Capacitance

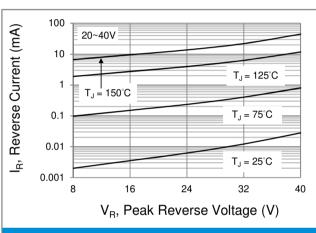


Fig.3 Typical Reverse Characteristics

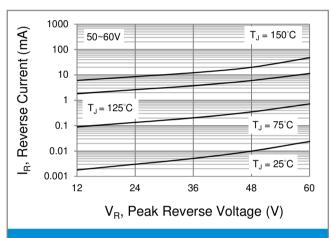


Fig.4 Typical Reverse Characteristics

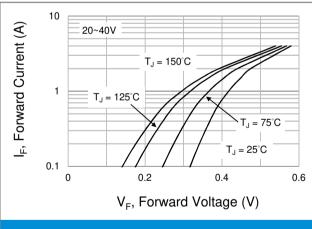
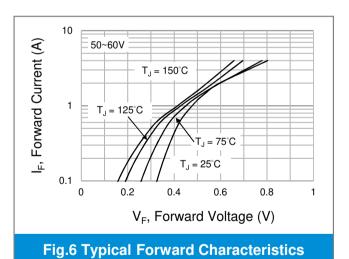


Fig.5 Typical Forward Characteristics



120 Percent of Reverse Voltage (%) 100 60 40 20 75 T_{.J}, Junction Temperature (°C)

Fig.7 Operating Temperature Derating Curve

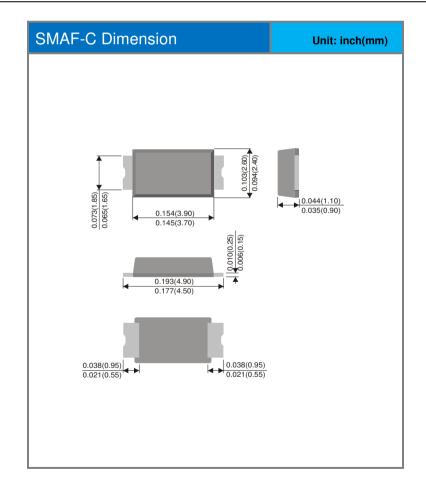


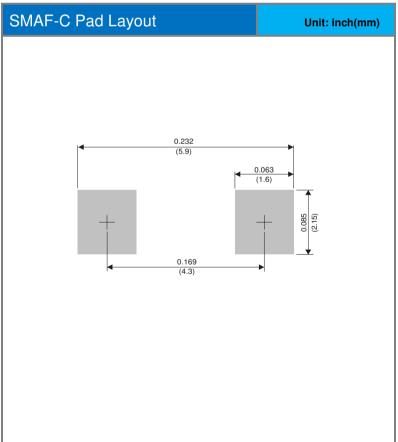


Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
SB22AFC_R1_00001	SMAF-C	3K pcs / 7" reel	SB22	Halogen free
SB23AFC_R1_00001	SMAF-C	3K pcs / 7" reel	SB23	Halogen free
SB24AFC_R1_00001	SMAF-C	3K pcs / 7" reel	SB24	Halogen free
SB25AFC_R1_00001	SMAF-C	3K pcs / 7" reel	SB25	Halogen free
SB26AFC_R1_00001	SMAF-C	3K pcs / 7" reel	SB26	Halogen free

Packaging Information & Mounting Pad Layout









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