



SB22AFC ~ SB26AFC Series

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

SMAF-C



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 ($T_A = 25^\circ\text{C}$ 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	V_R	20	30	40	50	60	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$			2			A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I_{FSM}			50			A
Instantaneous Forward Voltage at 2A	V_F		0.5		0.7		V
Reverse Current ^(Note 3)	I_R			0.1			mA
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 4V$	C_J		98		76		pF
Typical Thermal Resistance <small>(Note 1)</small> <small>(Note 2)</small>	$R_{\theta JL}$		20				$^\circ\text{C}/\text{W}$
	$R_{\theta JA}$		150				
Operating Junction Temperature Range	T_J		-55 to +150				$^\circ\text{C}$
Storage Temperature Range	T_{STG}		-55 to +150				$^\circ\text{C}$

NOTES:

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



SB22AFC ~ SB26AFC Series

TYPICAL CHARACTERISTIC CURVES

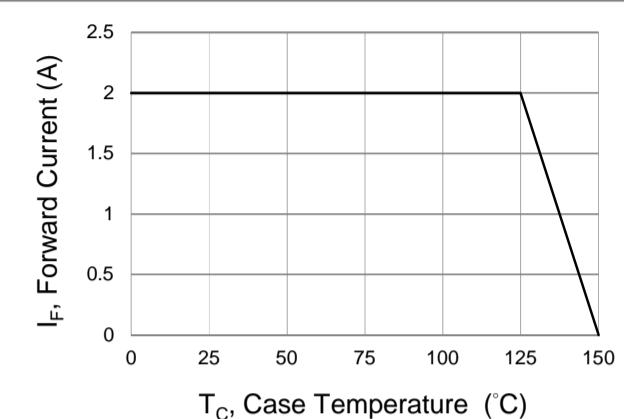


Fig.1 Forward Current Derating Curve

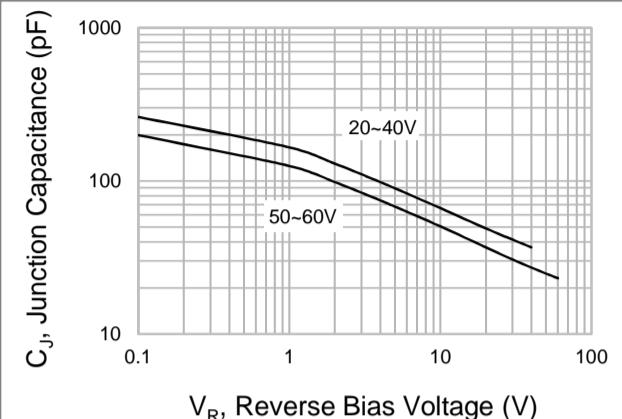


Fig.2 Typical Junction Capacitance

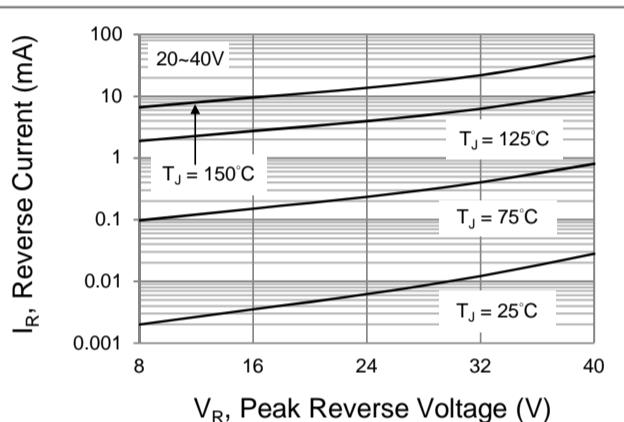


Fig.3 Typical Reverse Characteristics

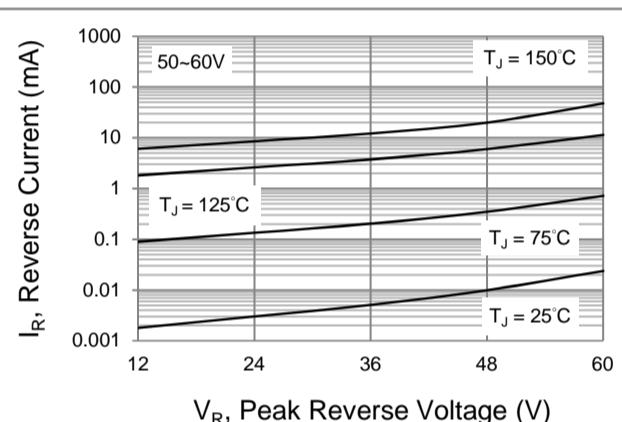


Fig.4 Typical Reverse Characteristics

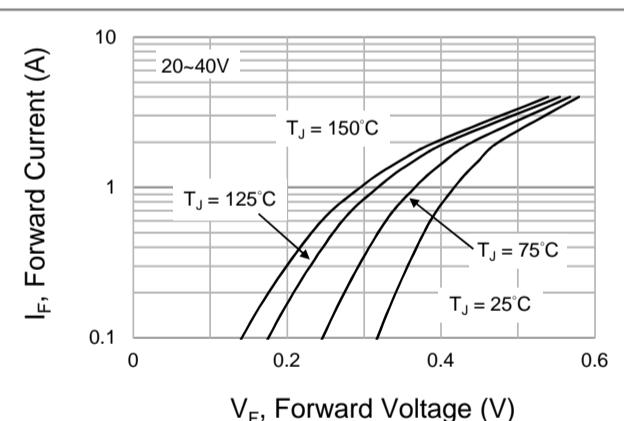


Fig.5 Typical Forward Characteristics

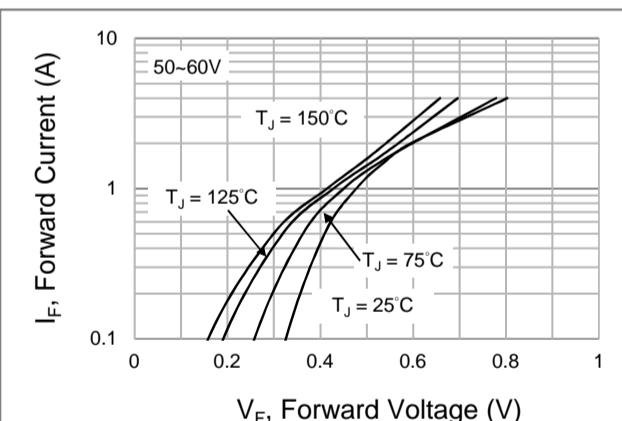


Fig.6 Typical Forward Characteristics

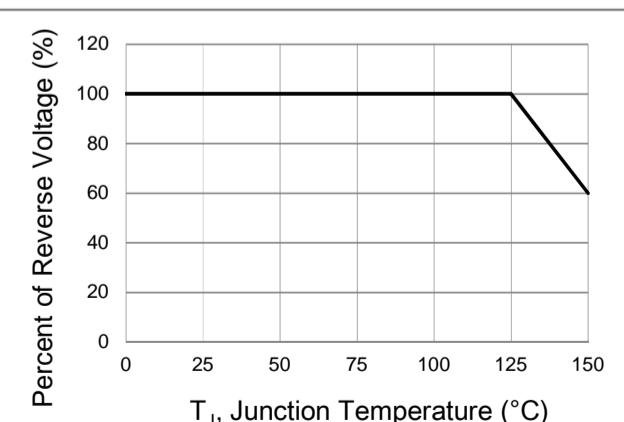


Fig.7 Operating Temperature Derating Curve



SB22AFC ~ SB26AFC Series

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

