



Surface Mount Schottky Barrier Rectifier

Voltage 20~60 V Current 3 A

Features

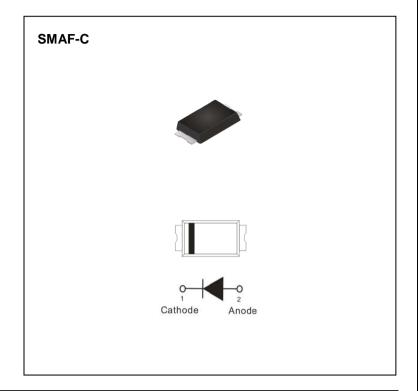
- Low power loss, high efficiency
- High surge current capability
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

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	SB32AFC	SB33AFC	SB34AFC	SB35AFC	SB36AFC	UNIT
Maximum Recurrent Peak Reverse Voltage	Vrrm	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)}	3					А
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	IFSM	80				А	
Instantaneous Forward Voltage at 3A	VF	0.5 0.75			75	V	
Reverse Current ^(Note 3)	I _R	100				uA	
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 0V$	Сл	485 385			35	pF	
Typical Thermal Resistance (Note 1) (Note 2)	Røjl Røja	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 a FR4 PCB, single-sided copper, with 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





TYPICAL CHARACTERISTIC CURVES

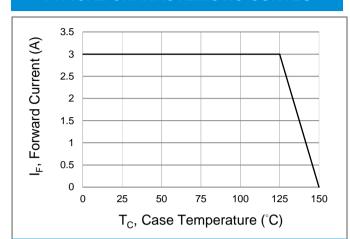


Fig.1 Forward Current Derating Curve

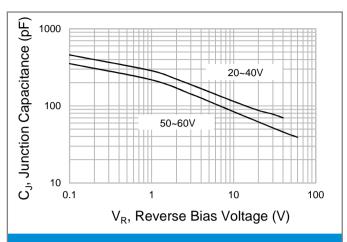


Fig.2 Typical Junction Capacitance

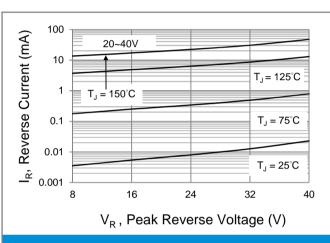


Fig.3 Typical Reverse Characteristics

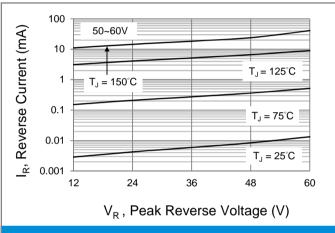


Fig.4 Typical Reverse Characteristics

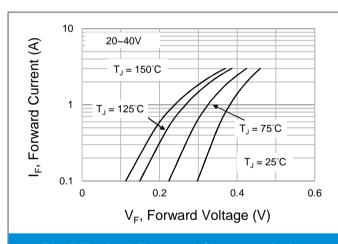


Fig.5 Typical Forward Characteristics

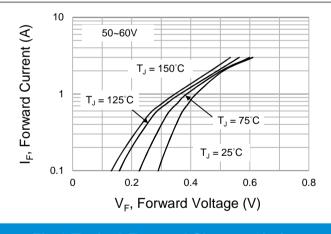


Fig.6 Typical Forward Characteristics

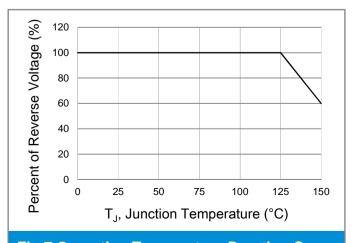


Fig.7 Operating Temperature Derating Curve

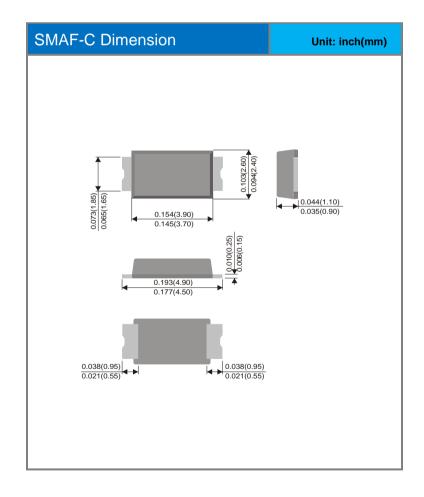


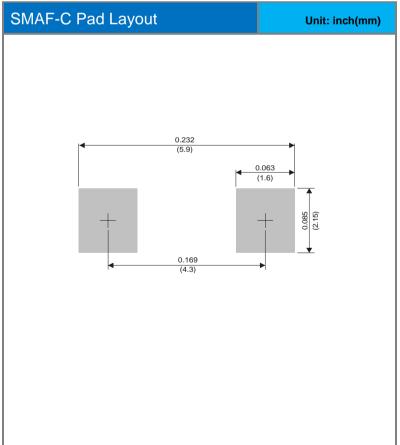


Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
SB32AFC_R1_00001	SMAF-C	3K pcs / 7" reel	SB32	Halogen free
SB33AFC_R1_00001	SMAF-C	3K pcs / 7" reel	SB33	Halogen free
SB34AFC_R1_00001	SMAF-C	3K pcs / 7" reel	SB34	Halogen free
SB35AFC_R1_00001	SMAF-C	3K pcs / 7" reel	SB35	Halogen free
SB36AFC_R1_00001	SMAF-C	3K pcs / 7" reel	SB36	Halogen free

Packaging Information & Mounting Pad Layout









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