

# SFF03U60S

## Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 60 V

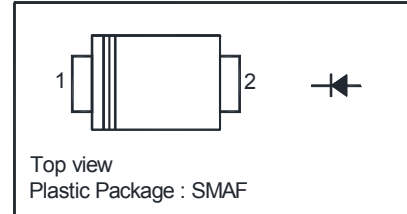
Forward Current - 3 A

### Features

- High forward surge current capability
- Low reverse leakage

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Maximum Ratings and Electrical Characteristics (at 25°C unless otherwise specified)

Parameter	Symbols	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS Voltage	$V_{RMS}$	60	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3	A
Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	80	A
Operating Junction Temperature Range	$T_j$	- 55 to + 150	°C
Storage Temperature Range	$T_{stg}$	- 55 to + 150	°C

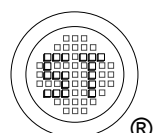
### Thermal Characteristics

Parameter	Symbol	Value	Unit
Typical Thermal Resistance from Junction to Ambient <sup>1)</sup>	$R_{\theta JA}$	80	°C/W

<sup>1)</sup> Device mounted on FR-4 substrate PC board, 2oz copper, with 1-inch square copper plate.

### Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 150 \mu\text{A}$	$V_{(BR)R}$	60	-	V
Forward Voltage at $I_F = 3 \text{ A}$ at $I_F = 5 \text{ A}$	$V_F$	- -	0.53 0.6	V
Reverse Current at $V_R = 60 \text{ V}$ at $V_R = 60 \text{ V}$ , $T_j = 125^\circ\text{C}$	$I_R$	- -	200 50	$\mu\text{A}$ mA



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## Electrical Characteristic Curves

Fig 1. Reverse Characteristic Curve

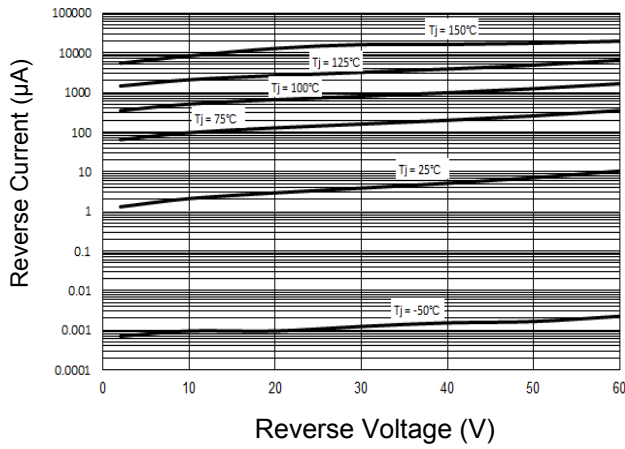


Fig 2. Forward Characteristic Curve

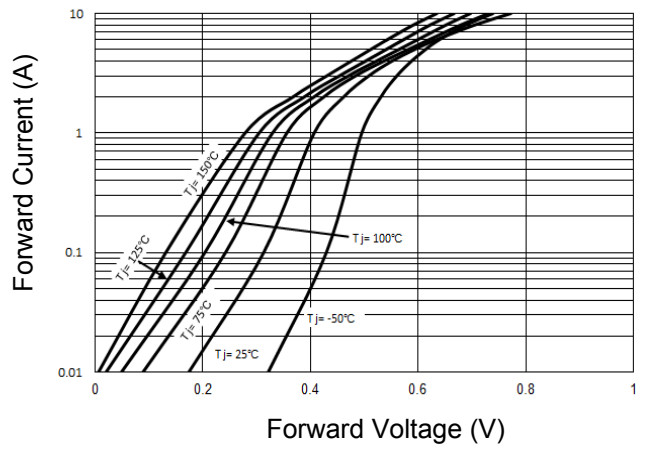


Fig 3. Junction Capacitance

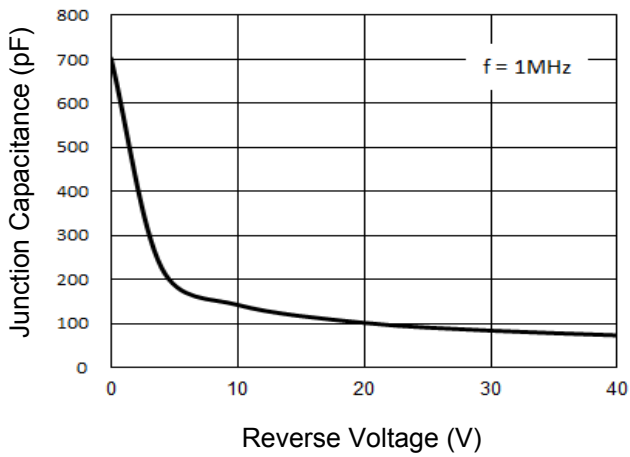
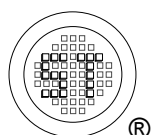
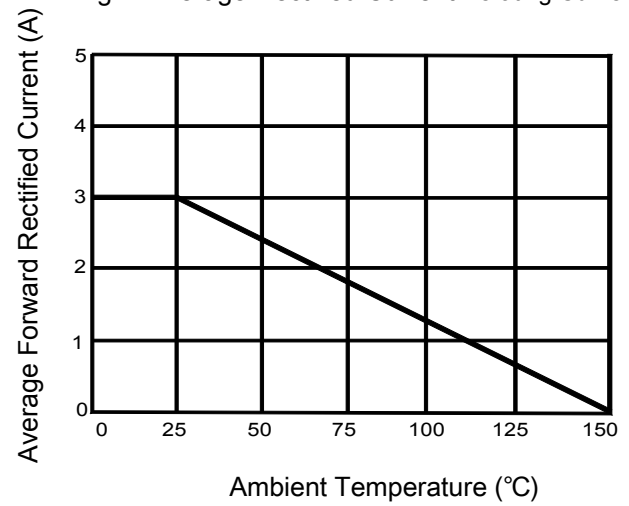


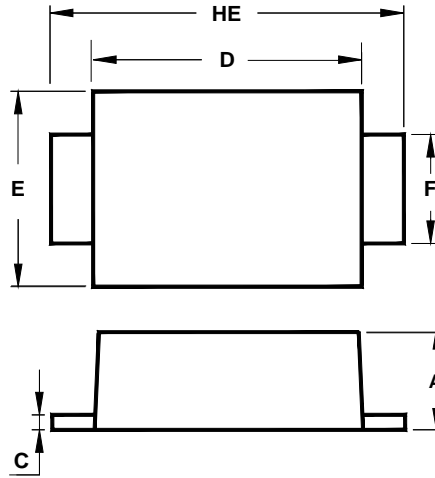
Fig 4. Average Rectified Current Derating Curve



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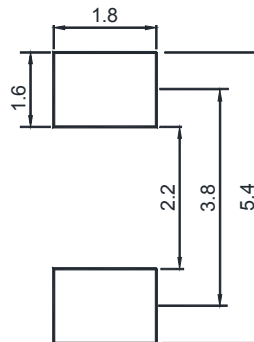
## Package Outline Dimensions (Units: mm)

SMAF



UNIT	A	C	D	E	F	H <sub>E</sub>
mm	1.1 0.9	0.2 0.12	3.7 3.3	2.80 2.40	1.6 1.3	4.9 4.4

## Recommended Soldering Footprint



## Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SMAF	12	4 ± 0.1	(0.157 ± 0.004)	178	7	3,000
				330	13	10,000

## Marking information

" FN " = Part No.  
 " III " = Cathode line  
 "YYWW" = Date Code Marking  
 "Y" = Year  
 "W" = Week  
 Font type: Arial

