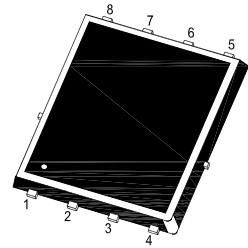


# WSM510H100S-HAF

## Surface Mount Schottky Barrier Rectifier

### Features

- Low thermal resistance
- High surge capability
- Halogen and Antimony Free(HAF),  
RoHS compliant



1. Anode 2. Anode 3. Anode 4. NC  
5. Cathode 6. Cathode 7. Cathode 8. Cathode  
DFN5060 Plastic Package

### Applications

- Switching Power Supplies including Notebook  
Netbook Adapters , ATX and Flat Panel Display
- High Frequency and DC-DC Converters
- LED Lighting



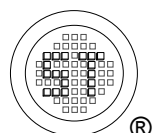
### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RRM}$	100	V
DC Reverse Voltage	$V_R$	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	240	A
Thermal Resistance, Junction to Case <sup>1)</sup>	$R_{\theta JC}$	3.4	$^\circ\text{C/W}$
Operating Temperature Range	$T_j$	- 50 to + 175	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 50 to + 175	$^\circ\text{C}$

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

### Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Typ.	Max.	Unit
Forward Voltage at $I_F = 5\text{ A}$ at $I_F = 10\text{ A}$ at $I_F = 15\text{ A}$ at $I_F = 5\text{ A}$ , $T_j = 125^\circ\text{C}$ at $I_F = 10\text{ A}$ , $T_j = 125^\circ\text{C}$	$V_F$	- - - 0.57 0.64	0.7 0.79 0.85 - -	V
Reverse Current at $V_R = 100\text{ V}$ at $V_R = 100\text{ V}$ , $T_j = 125^\circ\text{C}$	$I_R$	- 2.5	10 -	$\mu\text{A}$ mA



# WSM510H100S-HAF

## Electrical Characteristics Curves

Fig 1. Reverse Characteristics Curve

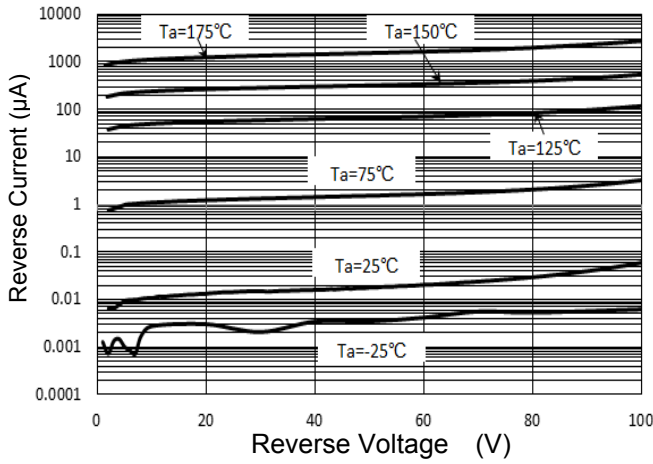


Fig 2. Forward Characteristics Curve

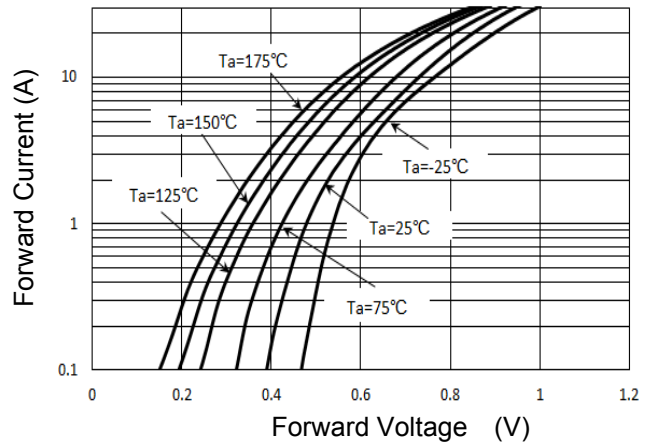


Fig 3. Forward Current Derating Curve

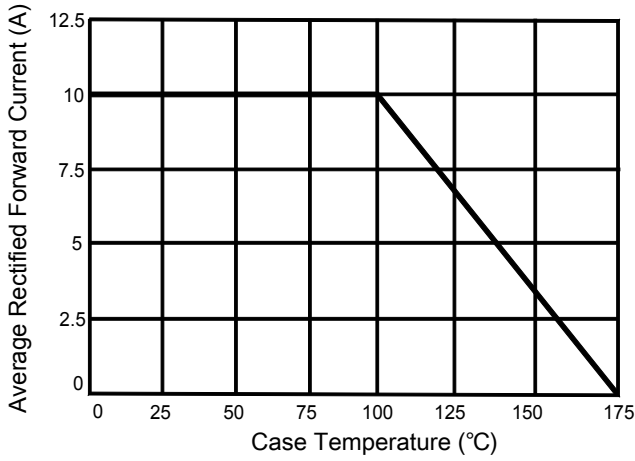


Fig 4. Junction Capacitance

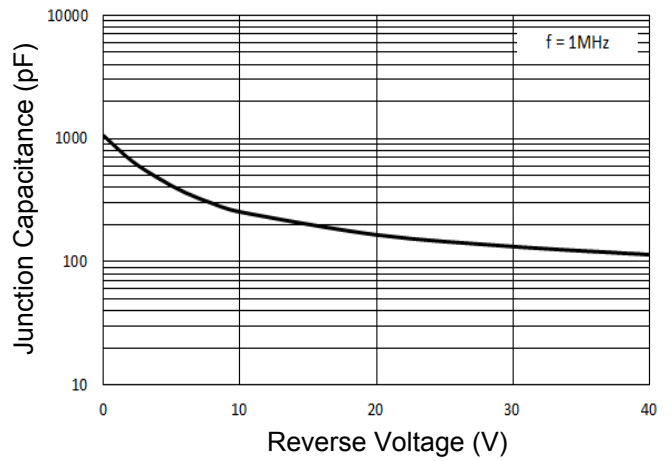
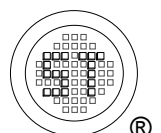
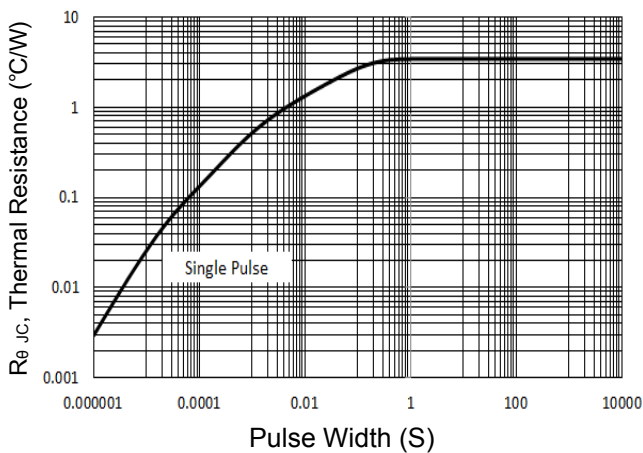


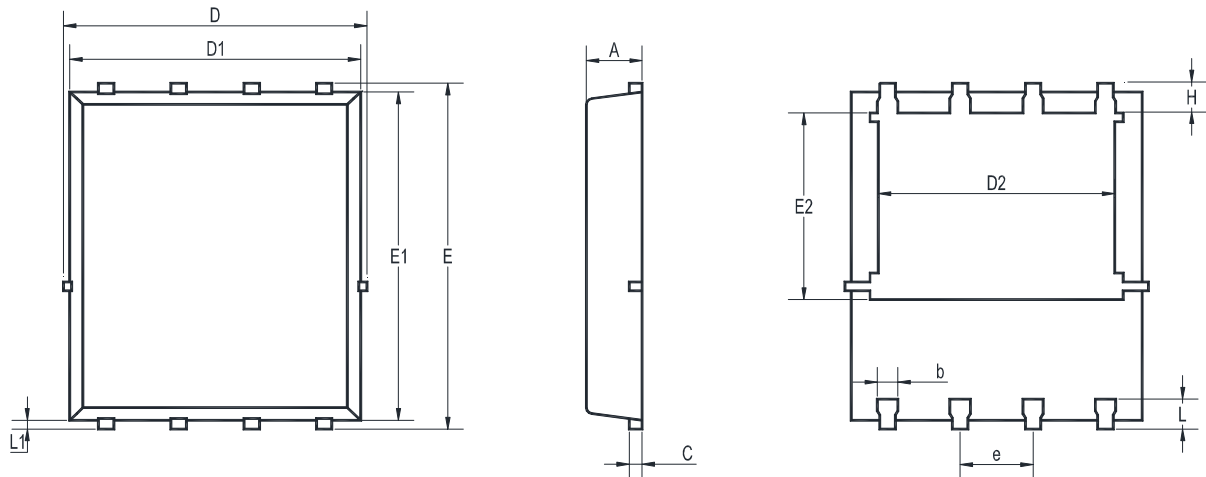
Fig 5. Thermal Resistance Curve



# WSM510H100S-HAF

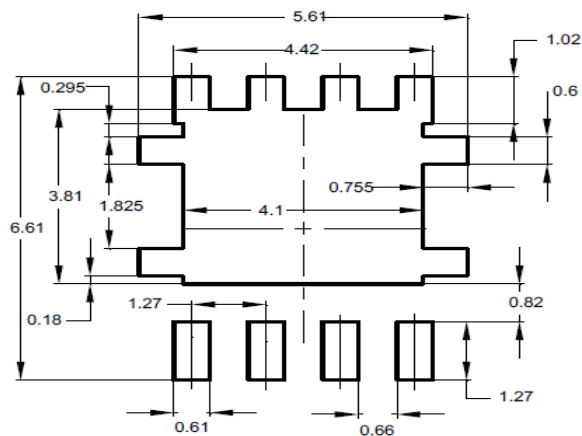
## Package Outline Dimensions (Units: mm)

DFN5060



UNIT	A	b	C	D	D1	D2	E	E1	E2	e	L	L1	H
mm	1.12	0.51	0.34	5.26	5.1	4.5	6.25	6	3.66	1.37	0.71	0.2	0.71
	0.9	0.33	0.11	4.7	4.7	3.56	5.75	5.6	3.18	1.17	0.35	0.06	0.35

## Recommended Soldering Footprint



## Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN5060	12	8 ± 0.1	0.315 ± 0.004	330	13	5,000

## Marking information

" SM510H100S " = Part No.

" \*\*\*\*\* " = Date Code Marking

Font type: Arial

