



# SR5H15-AU

## Surface Mount Ultra Low I<sub>R</sub> Schottky Barrier Rectifier

**Voltage** 150 V **Current** 5 A

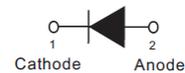
### Features

- Low leakage current
- Ideal for automated placement
- Low power loss, high efficiency
- High surge current capability
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### Mechanical Data

- Case : SMB Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.092 grams

SMB



### Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	150	V
Maximum RMS Voltage	V <sub>RMS</sub>	105	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	150	V
Maximum Average Forward Current	I <sub>F(AV)</sub>	5	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I <sub>FSM</sub>	150	A
Typical Junction Capacitance Measured at 1 MHz And Applied V <sub>R</sub> = 4 V	C <sub>J</sub>	130	pF
Typical Thermal Resistance	(Note 1) R <sub>θJA</sub>	135	°C/W
	(Note 2) R <sub>θJC</sub>	18	
	(Note 2) R <sub>θJL</sub>	26	
Operating Junction Temperature Range	T <sub>J</sub>	-55~175	°C
Storage Temperature Range	T <sub>STG</sub>	-55~175	°C



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### Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 1\text{ A}, T_J = 25^\circ\text{C}$	-	0.68	-	V
		$I_F = 3\text{ A}, T_J = 25^\circ\text{C}$	-	0.76	-	V
		$I_F = 5\text{ A}, T_J = 25^\circ\text{C}$	-	-	0.85	V
		$I_F = 1\text{ A}, T_J = 125^\circ\text{C}$	-	0.54	-	V
		$I_F = 3\text{ A}, T_J = 125^\circ\text{C}$	-	0.63	-	V
		$I_F = 5\text{ A}, T_J = 125^\circ\text{C}$	-	0.67	-	V
Reverse Current	$I_R$	$V_R = 120\text{ V}, T_J = 25^\circ\text{C}$	-	16	-	nA
		$V_R = 150\text{ V}, T_J = 25^\circ\text{C}$	-	-	0.5	$\mu\text{A}$
		$V_R = 150\text{ V}, T_J = 125^\circ\text{C}$	-	-	1	mA

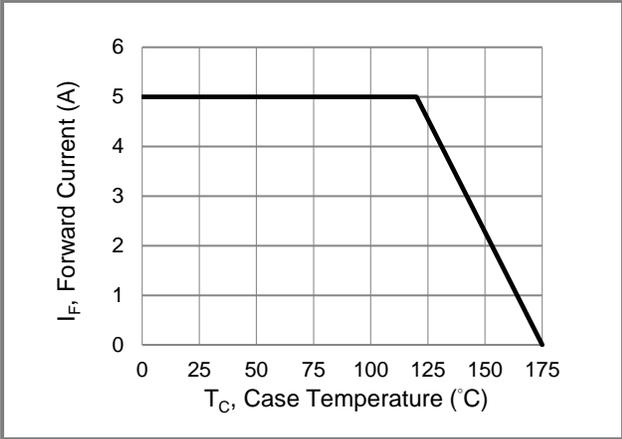
NOTES :

1. Mounted on a FR4 PCB, single-sided copper, standard footprint.
2. Mounted on a FR4 PCB, single-sided copper, with 100 cm<sup>2</sup> copper pad area.

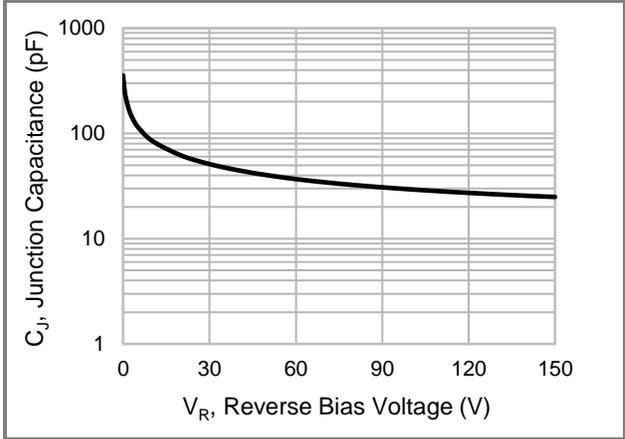


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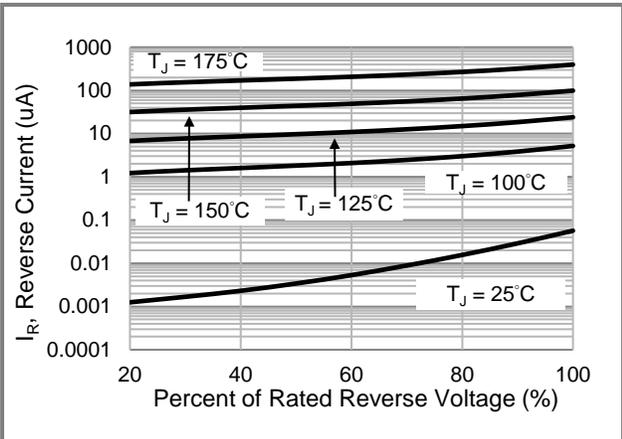
## TYPICAL CHARACTERISTIC CURVES



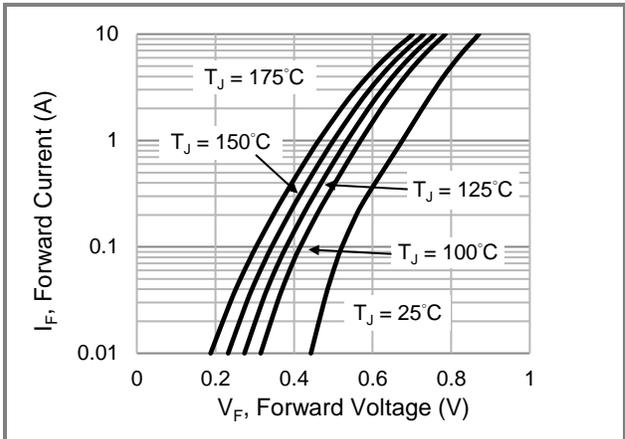
**Fig.1 Forward Current Derating Curve**



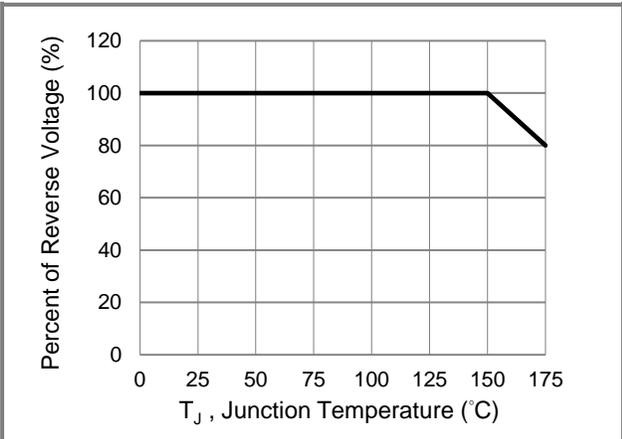
**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**



**Fig.5 Operating Temperature Derating Curve**

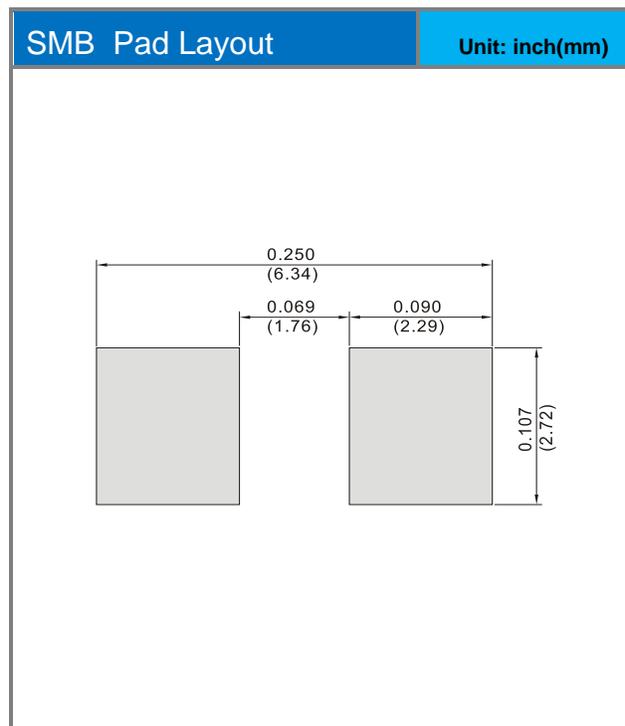
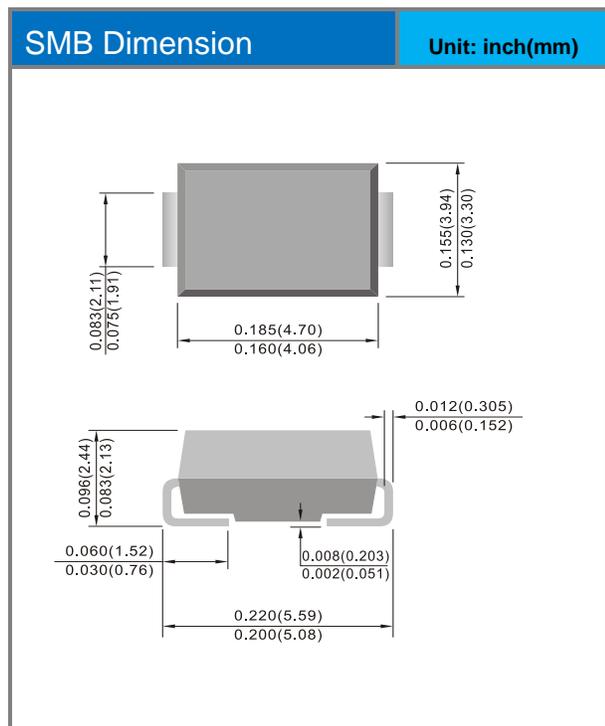


# SR5H15-AU

**Part No. Packing Code Version**

Part No.	Package Type	Packing Type	Marking	Version
SR5H15-AU	SMB	3K pcs / 13" reel	SR5H15	Halogen free RoHS compliant

## Packaging Information & Mounting Pad Layout





## SR5H15-AU

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