



# SR34L

## ULTRA LOW VF SCHOTTKY BARRIER RECTIFIER

**Voltage**

**40 V**

**Current**

**3 A**

**SMB / DO-214AA**

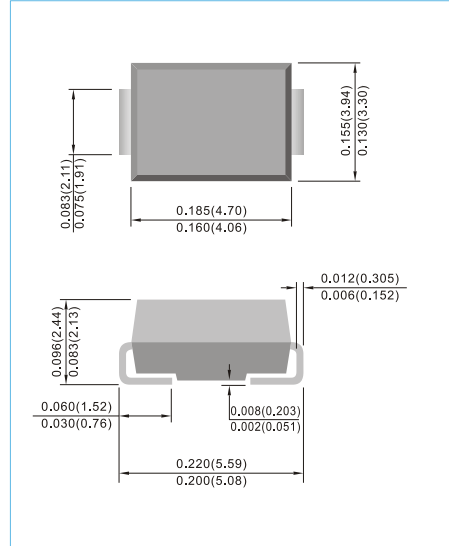
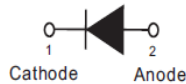
Unit : inch(mm)

### Features

- Ideal for automated placement
- Ultra low forward voltage drop, low power loss
- High efficiency operation
- Low thermal resistance
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### Mechanical Data

- Case: SMB package
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Weight: 0.003 ounces, 0.092 grams.
- Marking: Part number



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

PARAMETER	SYMBOL	LIMIT	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	40	V
Maximum rms voltage	V <sub>RMS</sub>	28	V
Maximum dc blocking voltage	V <sub>R</sub>	40	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	3	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	100	A
Typical thermal resistance	(Note 1) R <sub>θJC</sub>	10	°C/W
	(Note 2) R <sub>θJA</sub>	135	
Operating junction temperature range	T <sub>J</sub>	-55 to +150	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C

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

2. Mounted on a FR4 PCB, single-sided copper, mini pad.



# SR34L

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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS	
Breakdown voltage	$V_{BR}$	$I_R=1\text{mA}$ $T_J=25^\circ\text{C}$	40	-	-	V	
Instantaneous forward voltage	$V_F$	$I_F=0.1\text{A}$ $T_J=25^\circ\text{C}$	-	0.29	-	V	
		$I_F=1.5\text{A}$ $T_J=25^\circ\text{C}$	-	0.39	-	V	
		$I_F=3\text{A}$ $T_J=25^\circ\text{C}$	-	0.44	0.47	V	
		$I_F=0.1\text{A}$ $T_J=125^\circ\text{C}$	-	0.14	-	V	
Reverse current	$I_R$	$V_R=32\text{V}$ $T_J=25^\circ\text{C}$	-	15	-	$\mu\text{A}$	
		$V_R=40\text{V}$	$T_J=25^\circ\text{C}$	-	-	100	$\mu\text{A}$
			$T_J=125^\circ\text{C}$	-	15	-	$\text{mA}$

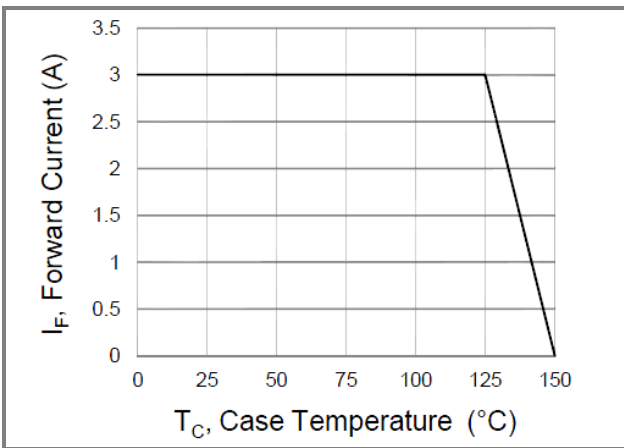


Fig.1 Forward Current Derating Curve

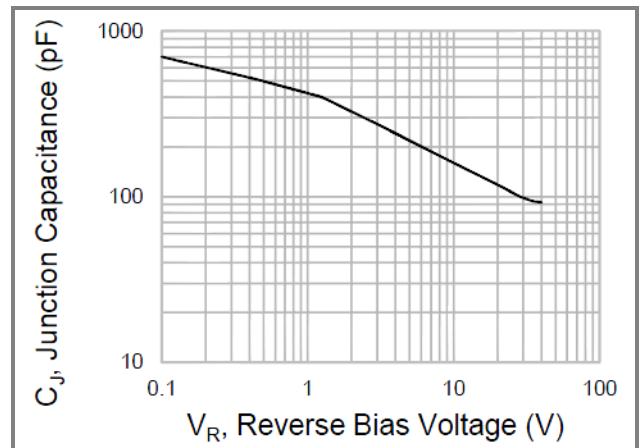


Fig.2 Typical Junction Capacitance

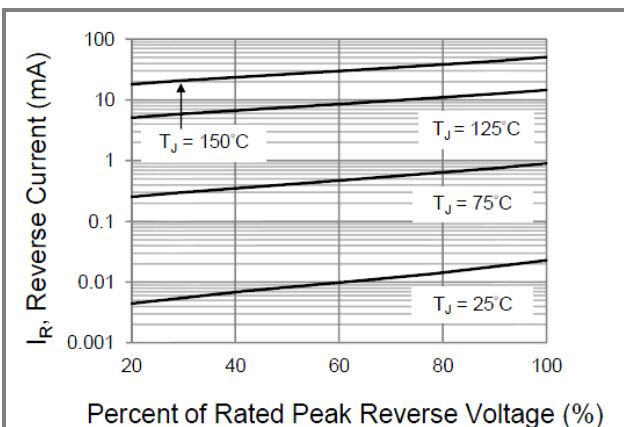


Fig.3 Typical Reverse Characteristics

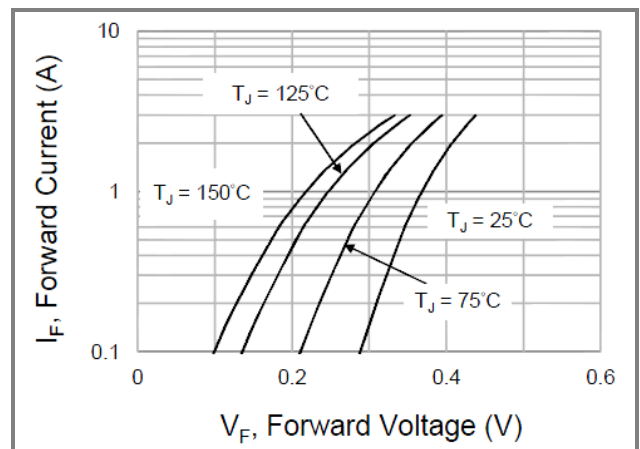
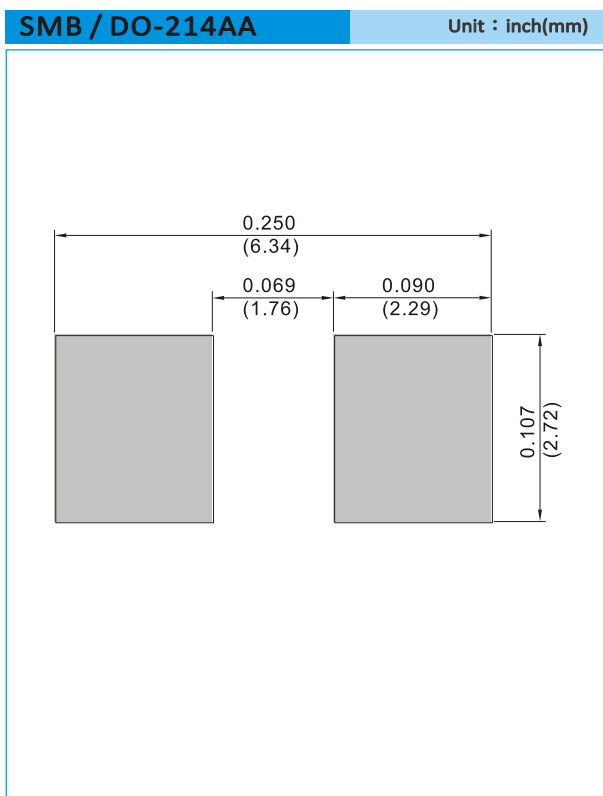


Fig.4 Typical Forward Characteristics



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R – 3K per 13" plastic Reel
  - T/R – 0.8K per 7" plastic Reel



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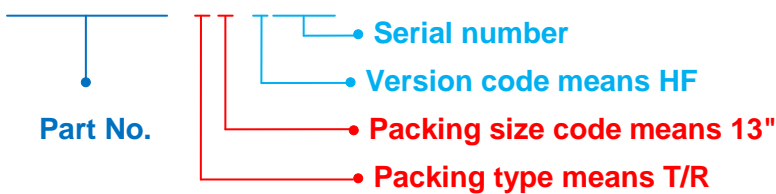
**Part No\_packing code\_Version**

SR34L\_R1\_00001

SR34L\_R2\_00001

**For example :**

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> -5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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