



# SB340

**DIODE**

## 3.0A SCHOTTKY BARRIER RECTIFIER

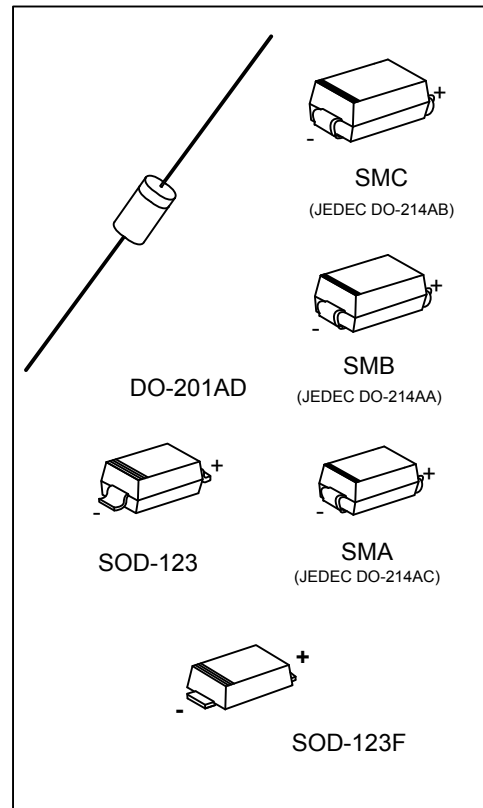
■ **DESCRIPTION**

The UTC **SB340** is a Schottky Rectifier with high current capacity and low forward voltage.

The UTC **SB340** is suitable for polarity protection, low voltage and high frequency inverters free wheeling applications

■ **FEATURES**

- \* High Current Capability
- \* Low Forward Voltage



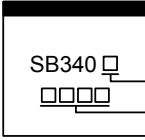
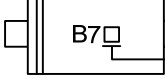
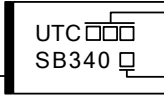
■ **ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB340L-CA2-R	SB340G-CA2-R	SOD-123	K	A	Tape Reel
SB340L-CA2F-R	SB340G-CA2F-R	SOD-123F	K	A	Tape Reel
SB340L-SMA-R	SB340G-SMA-R	SMA	K	A	Tape Reel
SB340L-SMB-R	SB340G-SMB-R	SMB	K	A	Tape Reel
SB340L-SMC-R	SB340G-SMC-R	SMC	K	A	Tape Reel
SB340L-Z21D-B	SB340G-Z21D-B	DO-201AD	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

<p>SB340G-CA2-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) R: Tape Reel, B: Tape Box (2) CA2: SOD-123, CA2F: SOD-123F, CA2S: SOD-123S SMA: SMA, SMB: SMB, SMC: SMC (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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■ MARKING

PACKAGE	MARKING
DO-201AD	 <p>→ Cathode Band for uni-directional Only</p> <p>SB340 □</p> <p>□□□□ →</p> <p>→ Date Code</p> <p>L: Lead Free</p> <p>G: Halogen Free</p>
SOD-123 SOD-123F	 <p>B7 □ →</p> <p>L: Lead Free</p> <p>G: Halogen Free</p>
SMA SMB SMC	<p>Cathode Band for uni-directional Only ←</p>  <p>→ Date Code</p> <p>UTC □□□</p> <p>SB340 □ →</p> <p>L: Lead Free</p> <p>G: Halogen Free</p>

■ ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ , unless otherwise specified.)

PARAMETER		SYMBOL	RATINGS	UNIT
DC Blocking Voltage		$V_R$	40	V
Peak Repetitive Reverse Voltage		$V_{RRM}$	40	V
Working Peak Reverse Voltage		$V_{RWM}$	40	V
RMS Reverse Voltage		$V_{R(RMS)}$	28	V
Average Rectified Output Current		$I_O$	3.0	A
Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave		$I_{FSM}$	80	A
Power Dissipation	DO-201AD	$P_D$	3.12	W
	SOD-123		0.62	
	SOD-123F		1.315	
	SMA/SMB/SMC			
Junction Temperature		$T_J$	+125	$^\circ\text{C}$
Storage Temperature		$T_{STG}$	-65 ~ +125	$^\circ\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL DATA

PARAMETER		SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	DO-201AD	$\theta_{JC}$	20	$^\circ\text{C/W}$
	SOD-123	$\theta_{JL}$	30 (Note)	
	SOD-123F			
	SMA/SMB/SMC		20	

Note: FR-4 PCB, 2 oz Copper. Minimum recommended pad layout.

■ ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ , unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	$I_R=0.50\text{mA}$	40			V
Forward Voltage Drop (Note 1)	$V_{FM}$	$I_F=3.0\text{A}, T_J=25^\circ\text{C}$			0.50	V
		$I_F=3.0\text{A}, T_J=100^\circ\text{C}$			0.45	V
Peak Reverse Current at Rated DC Blocking Voltage (Note 2)	$I_{RM}$	$V_R=40\text{V}, T_J=25^\circ\text{C}$			500	$\mu\text{A}$
		$V_R=40\text{V}, T_J=100^\circ\text{C}$			50	mA

Note: Pulse Test: Pulse width  $\leq 300\mu\text{s}$ , Duty cycle  $\leq 2\%$ .

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