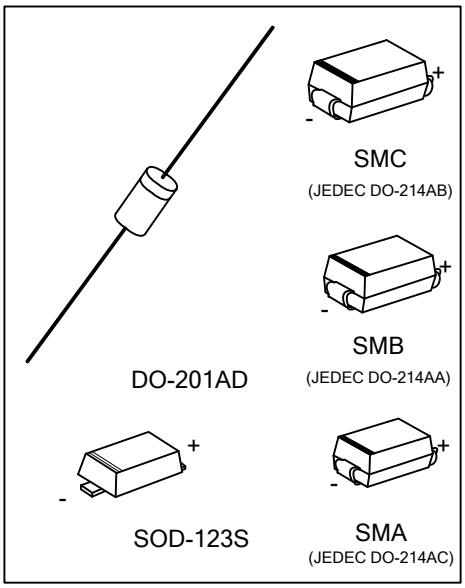
3.0A SCHOTTKY BARRIER RECTIFIER



■ 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

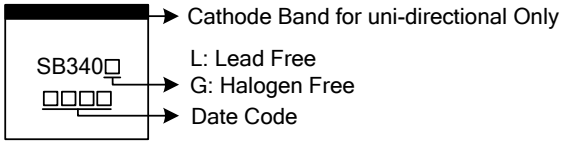
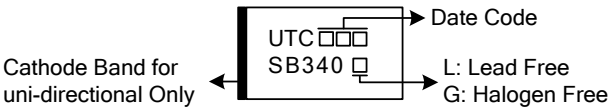
Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
-	SB340G-CA2S-R	SOD-123S	K	A	Tape Reel
SB340L-SMA-R	SB340G-SMA-R	SMA	K	A	Tape Reel
SB340L-SMB-R	SB340G-SMB-R	SMB	K	A	Tape Reel
SB340L-SMC-R	SB340G-SMC-R	SMC	K	A	Tape Reel
SB340L-Z21D-B	SB340G-Z21D-B	DO-201AD	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

SB340L-Z21D-B
(1)Packing Type
(2)Package Type
(3)Green Package

(1) R: Tape Reel, B: Tape Box
(2) Z21D: DO-201AD, CA2S: SOD-123S
SMA: SMA, SMB: SMB, SMC: SMC
(3) L: Lead Free, G: Halogen Free and Lead Free

■ MARKING

PACKAGE	MARKING
DO-201AD	
SOD-123S	
SMA SMB SMC	

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°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-123S		0.62	
	SMA/SMB/SMC		1.315	
Junction Temperature		T_J	+125	°C
Storage Temperature		T_{STG}	-65 ~ +125	°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	θ_{JC}	20	°C/W
	SOD-123S	θ_{JL}	30 (Note)	
	SMA/SMB/SMC		20	

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

■ ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified.)

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

Note: Pulse Test: Pulse width ≤ 300μs, Duty cycle ≤ 2%.