



SB3U40

Preliminary

DIODE

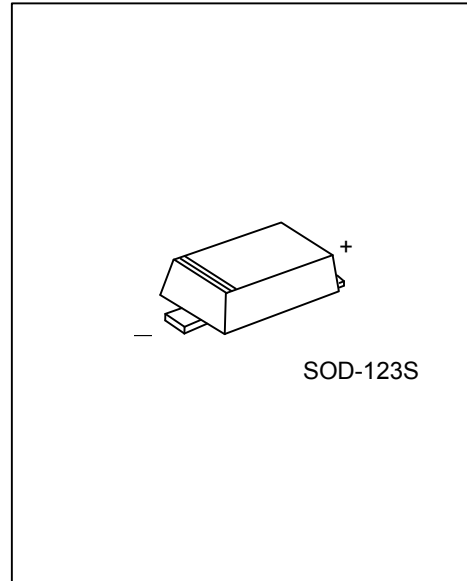
3A SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

The UTC SB3U40 is a 3.0A schottky barrier rectifier, it uses UTC's advanced technology to provide the customers with sort, fast switching capability and low forward voltage drop, etc.

FEATURES

- * Sort, fast switching capability
- * Low forward voltage drop



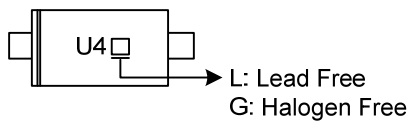
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB3U40L-CA2S-R	SB3U40G-CA2S-R	SOD-123S	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>SB3U40G-CA2S-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Green Package 	<ul style="list-style-type: none"> (1) R: Tape Reel (2) CA2S: SOD-123S (3) G: Halogen Free and Lead Free, L: Lead Free
---	---

MARKING



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

Single phase, half wave, 60Hz, resistive or inductive load. For capacitance load, derate current by 20%.

PARAMETER	SYMBOL	RATINGS	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}	40	V
DC Blocking Voltage	V_{RM}	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current	I_O	3	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	75	A
Operating Junction Temperature	T_J	-65 ~ +150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-65 ~ +150	$^\circ\text{C}$

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
Junction to Ambient	θ_{JA}	175	$^\circ\text{C}/\text{W}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=400\mu\text{A}$	40			V
Forward Voltage Drop	V_F	$I_F=0.5\text{A}, T_J=+25^\circ\text{C}$		0.30	0.34	V
		$I_F=1.0\text{A}, T_J=+25^\circ\text{C}$		0.34	0.39	V
		$I_F=3.0\text{A}, T_J=+25^\circ\text{C}$		0.42	0.47	V
Leakage Current (Note 2)	I_R	$V_R=40\text{V}, T_J=+25^\circ\text{C}$		70	400	μA
		$V_R=40\text{V}, T_J=+125^\circ\text{C}$		8	40	mA

Note: Short duration pulse test used to minimize self-heating effect.

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.