



SB3U40

Preliminary

DIODE

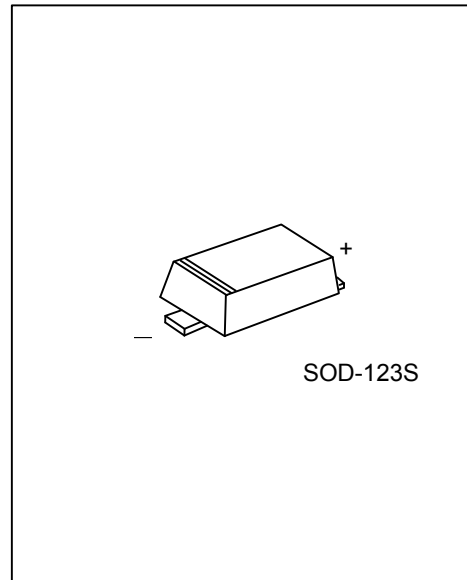
3A SCHOTTKY BARRIER RECTIFIER

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



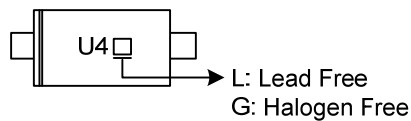
ORDERING INFORMATION

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
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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.

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