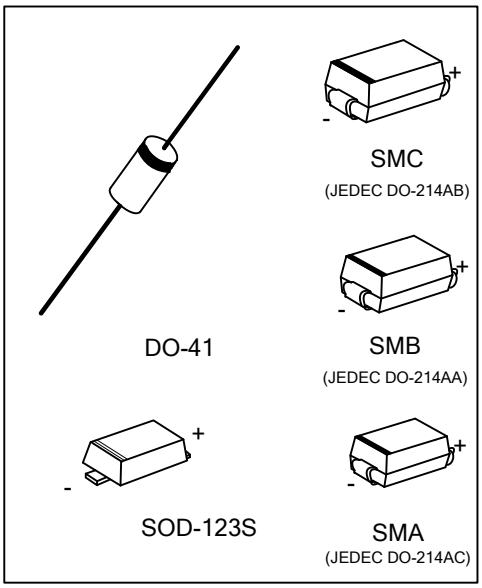
2.0A SCHOTTKY BARRIER RECTIFIER



■ DESCRIPTION

The UTC **SB240** is a Schottky Rectifier with high current capacity and low forward voltage.

The UTC **SB240** is suitable for polarity protection ,low voltage and high frequency inverters and free wheeling applications

■ FEATURES

* High Current Capability
* Low Forward Voltage

■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
-	SB240G-CA2S-R	SOD-123S	K	A	Tape Reel
SB240L-SMA-R	SB240G-SMA-R	SMA	K	A	Tape Reel
SB240L-SMB-R	SB240G-SMB-R	SMB	K	A	Tape Reel
SB240L-SMC-R	SB240G-SMC-R	SMC	K	A	Tape Reel
SB240L-Z41-R	SB240G-Z41-R	DO-41	K	A	Tape Reel
SB240L-Z41-B	SB240G-Z41-B	DO-41	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

SB240G-CA2S-R
(1)Packing Type
(2)Package Type
(3)Green Package

(1) R: Tape Reel, B: Tape Box
(2) CA2S: SOD-123S, SMA: SMA, SMB: SMB, SMC: SMC, Z41: DO-41
(3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING

PACKAGE	MARKING
SOD-123S	B2G
SMA SMB SMC	Cathode Band for uni-directional Only UTC □□□ S B 2 4 0 □ Date Code L: Lead Free G: Halogen Free
DO-41	SB240 □ □□□□ Cathode Band for uni-directional Only L: Lead Free G: Halogen Free Date Code

Copyright © 2016 Unisonic Technologies Co., Ltd

■ 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
Average Rectified Output Current	I_O	2.0	A
Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	I_{FSM}	80	A
Operating Temperature	T_J	-65 ~ +150	°C
Storage Temperature	T_{STG}	-65 ~ +150	°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	SOD-123S	θ_{JL}	25 (Note)	°C/W
	SMA/SMB SMC		20	°C/W
	DO-41	θ_{JC}	22	°C/W

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	$V_{(BR)R}$	I_R=0.50mA	60			V
Forward Voltage Drop	V_{FM}	I_F=2.0A, T_J=25°C			0.50	V
		I_F=2.0A, T_J=100°C			0.45	V
Peak Reverse Current at Rated DC Blocking Voltage	I_{RM}	V_R=40V, T_J=25°C			500	μA
		V_R=40V, T_J=100°C			20	mA

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

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. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.