



SB240

DIODE

2A SCHOTTKY BARRIER RECTIFIER

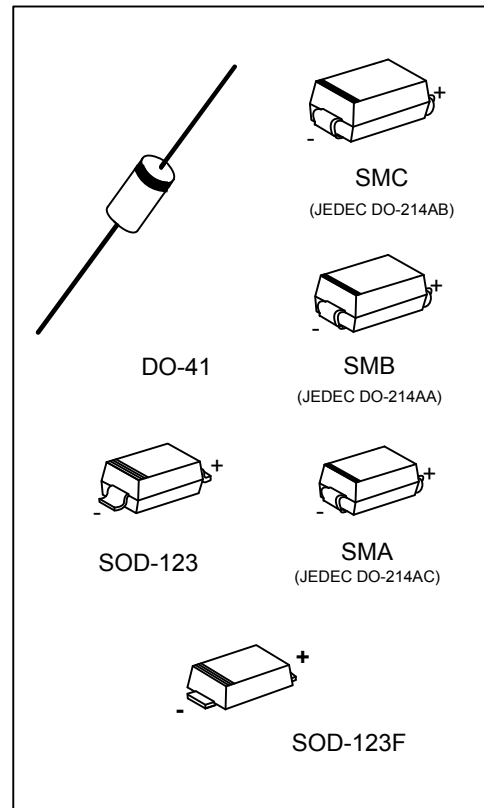
■ **DESCRIPTION**

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



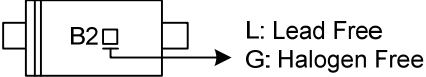
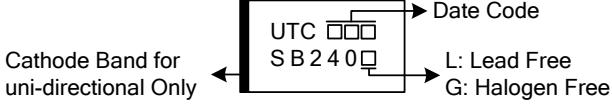
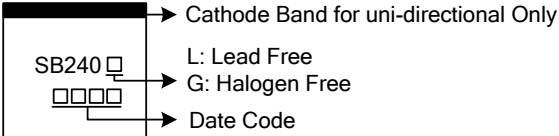
■ **ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB240L-CA2-R	SB240G-CA2-R	SOD-123	K	A	Tape Reel
SB240L-CA2F-R	SB240G-CA2F-R	SOD-123F	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

<p>SB240G-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, SMA: SMA, SMB: SMB, SMC: SMC, Z41: DO-41 (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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■ MARKING

PACKAGE	MARKING
<p>SOD-123 SOD-123F</p>	 <p>The diagram shows a diode package with a marking 'B2' followed by a small square. An arrow points to the right with the text 'L: Lead Free' and 'G: Halogen Free'.</p>
<p>SMA SMB SMC</p>	 <p>The diagram shows a diode package with a cathode band on the left. The marking consists of 'UTC' followed by two small squares, 'S B 2 4 0' followed by a small square, and 'L' followed by a small square. Arrows point to the right with the text 'Date Code' and 'L: Lead Free G: Halogen Free'. An arrow points to the cathode band with the text 'Cathode Band for uni-directional Only'.</p>
<p>DO-41</p>	 <p>The diagram shows a diode package with a cathode band on the top. The marking consists of 'SB240' followed by a small square, two small squares, and 'L' followed by a small square. Arrows point to the right with the text 'Cathode Band for uni-directional Only', 'L: Lead Free G: Halogen Free', and 'Date Code'.</p>

■ 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-123 SOD-123F	25 (Note)	°C/W
	SMA/SMB SMC		
	DO-41	22	°C/W
		θ _{JC}	

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	40			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%.

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