

UTC UNISONIC TECHNOLOGIES CO., LTD

SB140

DIODE

1.0A SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

The UTC SB140 is a Schottky Rectifier with high current capacity and low forward voltage.

The UTC SB140 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		Deekege	Pin Assignment		Deelvine	
Lead Free	Halogen Free	Раскаде	1	2	Packing	
SB140L-CA2S-R	SB140G-CA2S-R	SOD-123S	К	А	Tape Reel	
SB140L-CB2-R	SB140G-CB2-R	SOD-323	К	А	Tape Reel	
SB140L-SMA-R	SB140G-SMA-R	SMA	К	А	Tape Reel	
SB140L-Z41-B	SB140G-Z41-B	DO-41	К	А	Tape Box	
SB140L-Z41-R	SB140G-Z41-R	DO-41	К	Α	Tape Reel	
Note: Pin Assignment: A: Anode K: Cathode						

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SB140G- <u>CA2S-R</u> (1)Packing Type (2)Package Type (3)Green Package	 (1) R: Tape Reel, B: Tape Box (2) CA2S: SOD-123S, CB2: SOD-323, SMA: SMA Z41: DO-41 (3) G: Halogen Free and Lead Free, L: Lead Free
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MARKING

PACKAGE	MARKING			
SOD-123S SOD-323	L: Lead Free G: Halogen Free			
SMA	Cathode Band for uni-directional Only			
DO-41	SB140 Cathode Band for uni-directional Only L: Lead Free G: Halogen Free Date Code			



■ **ABSOLUTE MAXIMUM RATINGS** (T_A=25°C unless otherwise specified.)

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V _{RRM}	40	V
Working Peak Reverse Voltage	V _{RWM}	40	V
RMS Reverse Voltage	V _{R(RMS)}	28	V
DC Blocking Voltage	V _R	40	V
Average Rectified Output Current	lo	1.0	А
Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	I _{FSM}	40	А
Operating Temperature	TJ	-65 ~ +125	°C
Storage Temperature	T _{STG}	-65 ~ +150	°C

Notes: 1. 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.

- 2. Measured at ambient temperature at a distance of 9.5mm from the case.
- 3. Short duration test pulse used to minimize self-heating effect.

THERMAL DATA

PARAMETER		SYMBOL	RATINGS	UNIT
	SOD-123S	Αιθ	180	°C/W
lunation to Anabiant	SOD-323		210	°C/W
	SMA		88	°C/W
	DO-41		50	°C/W

Note: Device mounted on 1inch sq. copper pad, 2oz.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage (Note 1)	V _{(BR)R}	I _R =0.50mA	40			V
	Vfm	I⊧=1.0A, TJ=25°C			0.50	V
Forward Vollage Drop		I _F =1.0A, T _J =100°C			0.45	V
Leakage Current (Note 1)	I _{RM}	V _R =40V, T _J =25°C			500	μA
		V _R =40V, T _J =100°C			10	mA

Notes: 1. Short duration pulse test used to minimize self-heating effect.

2. Thermal resistance junction to case mounted on heatsink.



TYPICAL CHARACTERISTICS









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