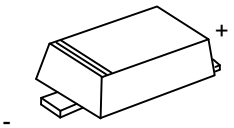
3A SCHOTTKY BARRIER RECTIFIER



SOD-123S

■ 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
		1	2	
SB140G-CA2S-R	SOD-123S	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

SB3U40G-CA2S-R (1)Packing Type (2)Package Type (3)Green Package	(1) R: Tape Reel (2) CA2S: SOD-123S (3) G: Halogen Free and Lead Free

■ MARKING

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°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	°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
Junction to Ambient	θ_{JA}	175	°C/W

■ 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=400μA	40			V
Forward Voltage Drop	V_F	I_F=0.5A, T_J=+25°C		0.30	0.34	V
		I_F=1.0A, T_J=+25°C		0.34	0.39	V
		I_F=3.0A, T_J=+25°C		0.42	0.47	V
Leakage Current (Note 2)	I_R	V_R=40V, T_J=+25°C		70	400	uA
		V_R=40V, T_J=+125°C		8	40	mA

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