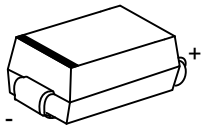
3.0A SCHOTTKY BARRIER RECTIFIER



SMB

■ DESCRIPTION

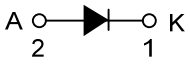
The UTC **SB3150** is a 3.0A schottky barrier rectifier, it uses UTC's advanced technology to provide the customers with high surge capability, high efficiency, high current capability and low forward voltage drop, etc.

The UTC **SB3150** is suitable for free wheeling and polarity protection, etc.

■ FEATURES

* High surge capability
* High efficiency
* High current capability
* Low power loss
* Low forward voltage drop

■ SYMBOL



■ ORDERING INFORMATION

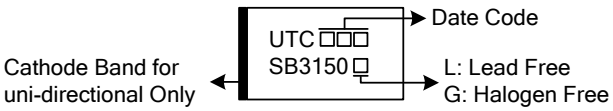
Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB3150L-SMB-R	SB3150G-SMB-R	SMB	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

SB3150L-SMB-R

(1)Packing Type	(1) R: Tape Reel
(2)Package Type	(2) SMB: SMB
(3)Green Package	(3) L: Lead Free, G: Halogen Free and Lead Free

■ MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	150	V
Working Peak Reverse Voltage	V_{RWM}	150	V
DC Blocking Voltage	V_R	150	V
Average Rectified Output Current	I_O	3.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	110	A
Junction Temperature Range	T_J	-65 ~ +150	°C
Storage Temperature Range	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 CHARACTERISTICS

PARAMETER	SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	θ_{JL}	20	°C/W

■ ELECTRICAL CHARACTERISTICS (PER LEG) (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	150			V
Instantaneous Forward Voltage Drop	V_{FM}	I_F=3.0A, T_J=25°C			0.89	V
Peak Reverse Current at Rated DC Blocking Voltage	I_{RM}	Rated DC Voltage, T_J=25°C			1.0	mA
		Rated DC Voltage, T_J=125°C			7.0	mA
Junction Capacitance (Note 2)	C_J			250		pF

Notes: 1. Pulse Test: Pulse width ≤ 300μs, Duty cycle ≤ 2%.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.