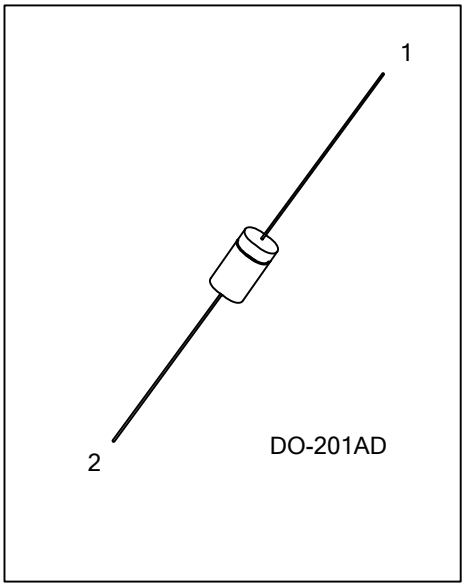
SB3100

DIODE

3.0A SCHOTTKY BARRIER RECTIFIER



■ DESCRIPTION

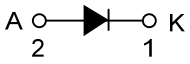
The UTC **SB3100** is a 3.0A schottky barrier rectifier, it uses UTC's advanced technology to provide the customers with high surge capability, high efficiency, high current capability and low forward voltage drop, etc.

The UTC **SB3100** 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

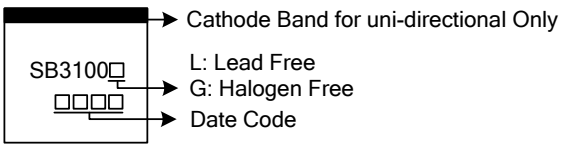
Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB3100L-Z21D-B	SB3100G-Z21D-B	DO-201AD	K	A	Tape Box

Note: Pin Assignment: A: Anode K: Cathode

SB3100L-Z21D-B
(1)Packing Type
(2)Package Type
(3)Green Package

(1) B: Tape Box
(2) Z21D: DO-201AD
(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}	100	V
Working Peak Reverse Voltage		V_{RWM}	100	V
DC Blocking Voltage		V_R	100	V
RMS Reverse Voltage		$V_{R(RMS)}$	70	V
Average Rectified Output Current (Note 2)	T_C=80°C	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}	80	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
Junction to Ambient	θ_{JA}	20	°C/W

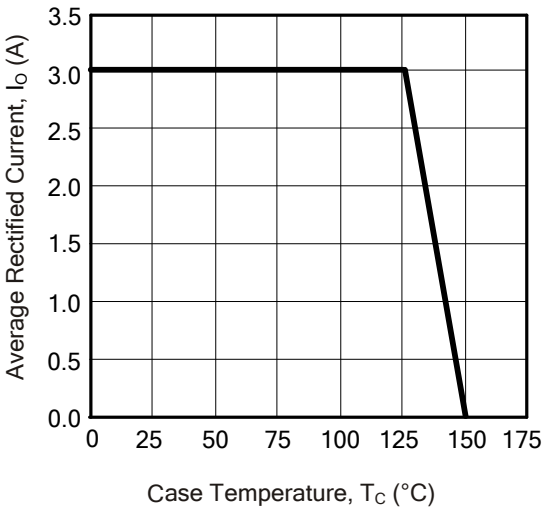
■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	V_F	I_F=3.0A			0.85	V
Peak Reverse Current at Rated DC Blocking Voltage	I_R	T_C=25°C			0.6	mA
		T_C=100°C			20	mA
Typical Junction Capacitance (Note 2)	C_j			250		pF

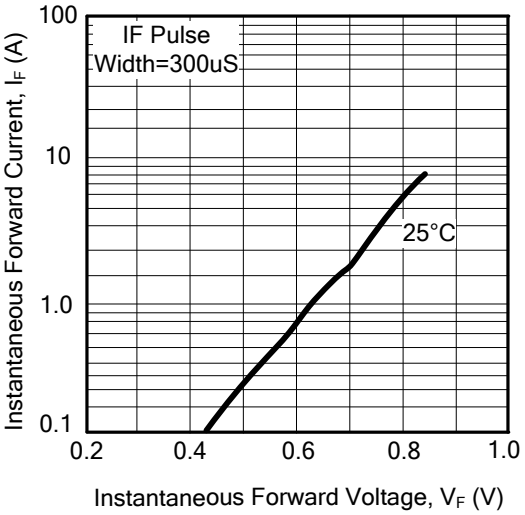
Notes: 1. Measured at ambient temperature at a distance of 9.5mm from case.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

■ TYPICAL CHARACTERISTICS

Forward Derating Curve



Typical Forward Characteristics



Typical Reverse Characteristics