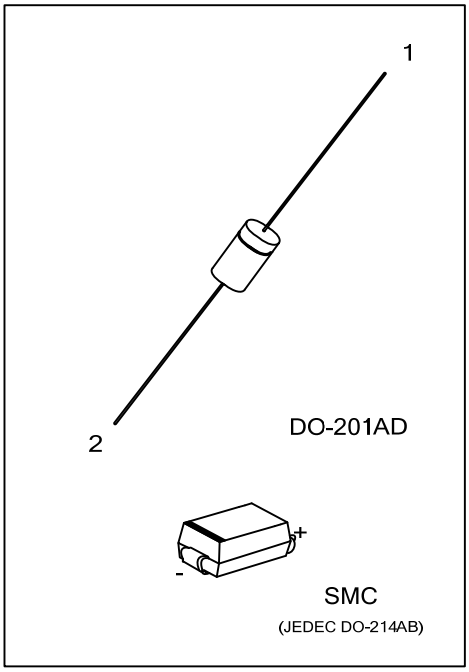
3.0A SCHOTTKY BARRIER RECTIFIER



■ DESCRIPTION

The UTC **SB360** is 3.0A schottky barrier rectifier. it uses UTC's advanced technology to provide customers with high current capability and low forward voltage drop, etc.

The UTC **SB360** is suitable for free wheeling, low voltage and polarity protection applications, etc.

■ FEATURES

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

■ ORDERING INFORMATION

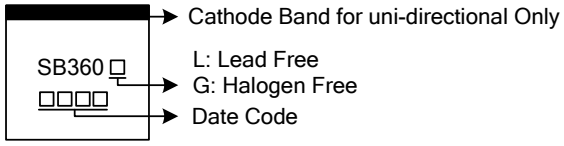
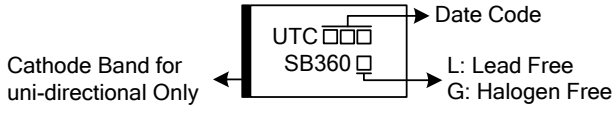
Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
SB360L-Z21D-R	SB360G-Z21D-R	DO-201AD	K	A	Tape Reel
SB360L-SMC-R	SB360G-SMC-R	SMC	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

SB360L-Z21D-R
(1)Packing Type
(2)Package Type
(3)Green Package

(1) R: Tape Reel
(2) Z21D: DO-201AD, SMC: SMC
(3) L: Lead Free, G: Halogen Free and Lead Free

■ MARKING

DO-201AD	SMC
	

■ 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
DC Blocking Voltage		V_R	60	V
Working Peak Reverse Voltage		V_{RWM}	60	V
Peak Repetitive Reverse Voltage		V_{RRM}	60	V
RMS Reverse Voltage		$V_{R(RMS)}$	42	V
Average Rectified Output Current (Note 2)	T_L=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
Operating Junction Temperature		T_J	-65~+150	°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.

■ THERMAL DATA

PARAMETER		SYMBOL	RATINGS	UNIT
Junction to Ambient	SMC	θ_{JA}	95	°C/W
	DO-201AD		30	

Note: Thermal resistance from junction to lead vertical P.C.B. mounted, 0.500" (12.7mm) lead length with 2.5x2.5" (63.5x63.5mm) copper pad.

■ ELECTRICAL CHARACTERISTICS (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	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R=0.50mA	60			V
Forward Voltage Drop	V_{FM}	I_F=3A, T_J=25°C			0.74	V
Leakage Current	I_{RM}	V_R=100V, T_A=25°C			500	μA
		V_R=100V, T_A=100°C			10	mA

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