



SBL1040C

Preliminary

DIODE

10A SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

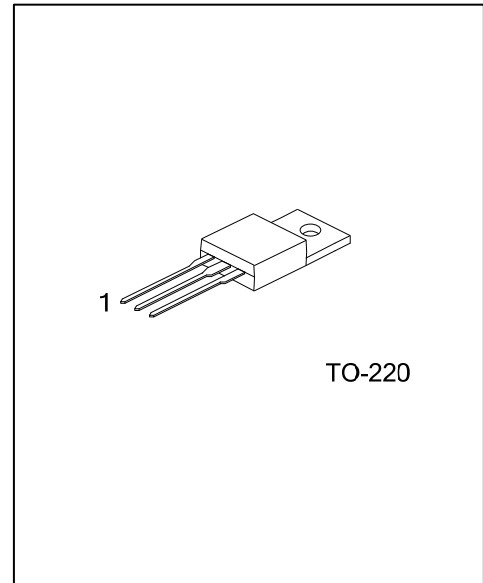
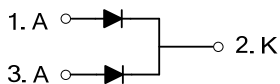
The UTC **SBL1040C** is a 10A schottky barrier rectifier, it uses UTC's advanced technology to provide the customers with high surge capability, high efficiency, high current capability, low power loss and low forward voltage drop, etc.

The UTC **SBL1040C** is suitable for free wheeling and polarity protection, etc.

FEATURES

- * High surge capability
- * High efficiency
- * High current capability
- * Low power Loss and low forward voltage drop

SMYBOL



ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
SBL1040CL-TA3-T	SBL1040CG-TA3-T	TO-220	A	K	A	Tube

<p>SBL1040CL-TA3-T</p>	<p>(1) Packing Type (2) Package Type (3) Lead Free</p>	<p>(1) T: Tube (2) TA3: TO-220 (3) L: Lead Free, G: Halogen Free</p>
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■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V_{RM}	40	V
Recurrent Peak Reverse Voltage	V_{RRM}	40	V
RMS Voltage	V_{RWM}	40	V
Average Forward Rectified Current	Per Leg	5	A
	Total	10	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load Per Diode	I_{FSM}	110	A
Operating Junction Temperature	T_J	-65~+150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-65~+150	$^{\circ}\text{C}$

Note: 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. Thermal resistance junction to case mounted on heatsink.

■ THERMAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$, unless otherwise noted.)

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	62.5	$^{\circ}\text{C}/\text{W}$
Junction to Case	θ_{JC}	3	$^{\circ}\text{C}/\text{W}$

■ ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$, unless otherwise noted.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage (Note 1)	V_F	$T_C=25^{\circ}\text{C}$, $I_F=5\text{A}$			0.56	V
Instantaneous Reverse Current at Rated DC Blocking Voltage Per Diode (Note 1)	I_R	$T_C=25^{\circ}\text{C}$, $V_R=40\text{V}$			100	μA
		$T_C=100^{\circ}\text{C}$, $V_R=40\text{V}$			50	mA

Note: 1. Pulse Test: 300 μs pulse width, 1% duty cycle.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

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