



SBL1040

Preliminary

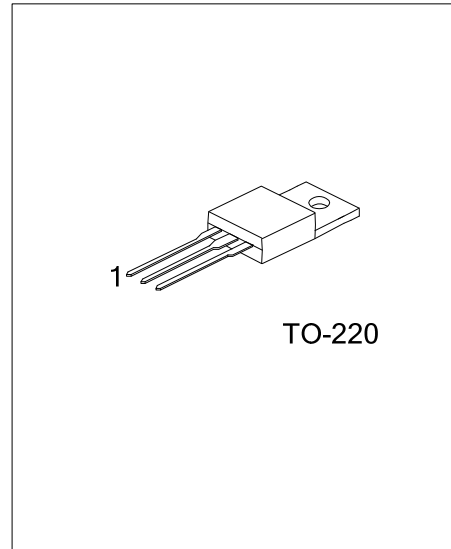
DIODE

10A SCHOTTKY BARRIER RECTIFIER

■ DESCRIPTION

The UTC **SBL1040** is a 10A schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop, high current capability and high efficiency, etc.

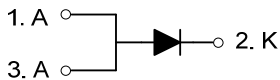
The UTC **SBL1040** is suitable for free wheeling, high frequency inverters, low voltage and polarity protection applications.



■ FEATURES

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

■ SYMBOL



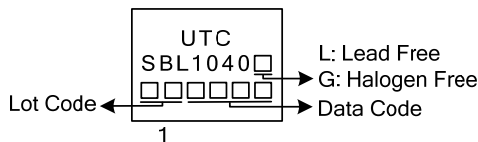
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
SBL1040L-TA3-T	SBL1040G-TA3-T	TO-220	A	K	A	Tube

Note: Pin Assignment: A: Athode K: Cathode

<p>SBL1040L-TA3-T</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Green Package</p>	<p>(1) T: Tube</p> <p>(2) TA3: TO-220</p> <p>(3) L: Lead Free, G: Halogen Free and Lead Free</p>
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■ MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
DC Blocking Voltage	V_R	40	V
Working Peak Reverse Voltage	V_{RWM}	40	V
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Forward Rectified Current	I_O	10	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load Per Diode	I_{FSM}	250	A
Operating Junction Temperature	T_J	-65~+150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-65~+150	$^\circ\text{C}$

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

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	62.5	$^\circ\text{C}/\text{W}$
Junction to Case	θ_{JC}	3.5	$^\circ\text{C}/\text{W}$

■ ELECTRICAL CHARACTERISTICS (Note 1) ($T_A=25^\circ\text{C}$, unless otherwise noted.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	V_F	$I_F=10\text{A}$, $T_C=25^\circ\text{C}$			0.60	V
Instantaneous Reverse Current at Rated DC Blocking Voltage Per Diode	I_R	$T_C=25^\circ\text{C}$			1.0	mA
		$T_C=100^\circ\text{C}$			50	mA
Junction Capacitance (Note 2)	C_J			700		pF

Notes: 1. Thermal resistance junction to case mounted on heatsink.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

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