



SBL1060

Preliminary

DIODE

10A SCHOTTKY BARRIER RECTIFIER

DESCRIPTION

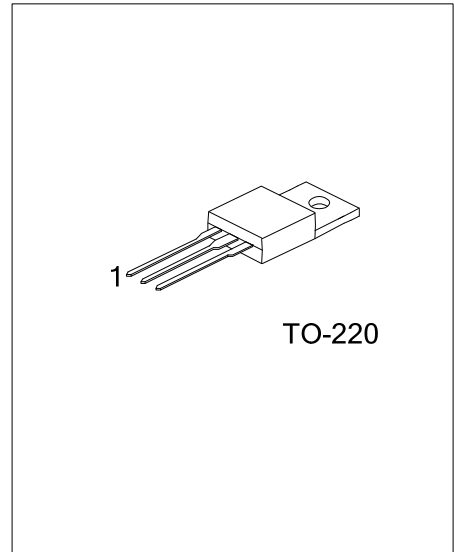
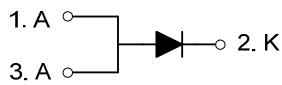
The UTC SBL1060 is a schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop and high efficiency, etc.

The UTC SBL1060 is suitable for use in free wheeling diodes, high frequency switch power supply and polarity protection applications.

FEATURES

- * Low forward voltage drop
* Low power loss
* High efficiency
* High reliability

SYMBOL



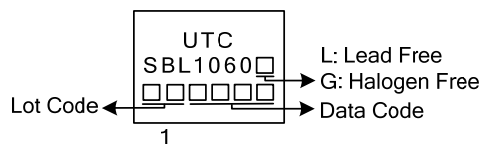
ORDERING INFORMATION

Table with columns: Ordering Number (Lead Free, Halogen Free), Package (TO-220), Pin Assignment (1: A, 2: K, 3: A), Packing (Tube). Rows include part numbers SBL1060L-TA3-T and SBL1060G-TA3-T.

Note: Pin Assignment: A: Athode K: Cathode

Table explaining ordering code SBL1060L-TA3-T: (1) Packing Type, (2) Package Type, (3) Green Package. Legend: (1) T: Tube, (2) TA3: TO-220, (3) L: Lead Free, G: Halogen Free and Lead Free.

MARKING



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

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 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	$I_F=10\text{A}$, $T_C=25^\circ\text{C}$			0.75	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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