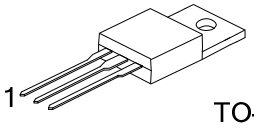
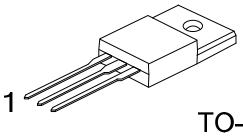
10A SCHOTTKY BARRIER RECTIFIER





■ DESCRIPTION

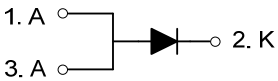
The UTC **SBL1045** is a 10A schottky barrier rectifier, it uses UTC's advanced technology to provide customers with low forward voltage drop, high current capability and high efficiency, etc.

The UTC **SBL1045** 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



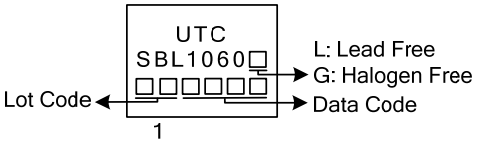
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
SBL1045L-TA3-T	SBL1045G-TA3-T	TO-220	A	K	A	Tube
SBL1045L-TF3-T	SBL1045G-TF3-T	TO-220F	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

MBR1045L-TA3-T (1)Packing Type (2)Package Type (3)Green Package	(1) T: Tube (2) TA3: TO-220, TF3: TO-220F (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
DC Blocking Voltage	V_R	45	V
Working Peak Reverse Voltage	V_{RWM}	45	V
Peak Repetitive Reverse Voltage	V_{RRM}	45	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	°C
Storage Temperature	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 (PER LEG)

PARAMETER		SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	TO-220	θ_{JC}	2	°C/W
	TO-220F		4	°C/W

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R=0.50mA	45			V
Forward Voltage Drop	V_{FM}	I_F=10A, T_C=25°C			0.6	V
Leakage Current	I_{RM}	Rated DC Voltage, T_C=25°C			1	mA
		Rated DC Voltage, T_C=100°C			50	mA
Junction Capacitance (Note 2)	C_J			700		pF

Notes: 1. Pulse Test: Pulse width ≤ 300μs, Duty cycle ≤ 2%.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.