



MBR6045C

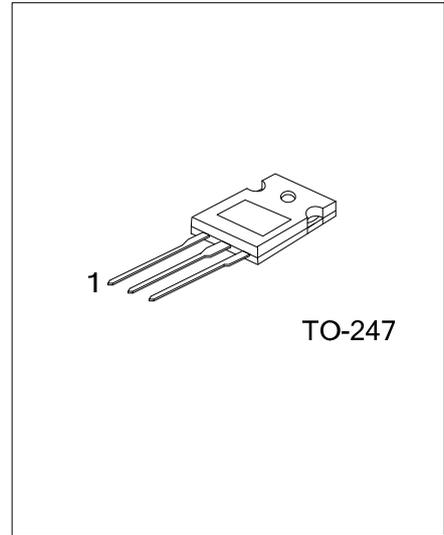
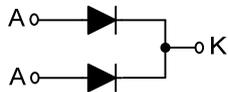
DIODE

60A SCHOTTKY BARRIER RECTIFIER DIODES

FEATURES

- * Guard Ring for Transient Protection
- * Low Power Loss, High Efficiency
- * High Surge Capability
- * High Current Capability and Low Forward Voltage Drop

SYMBOL



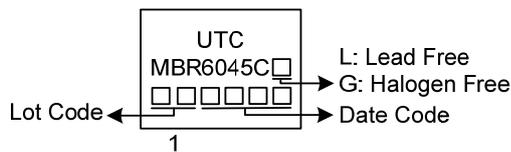
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
MBR6045CL-T47-T	MBR6045CG-T47-T	TO-247	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>MBR6045CG-T47-T</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) T: Tube (2) T47: TO-247 (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING



■ 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 _{RM}	45	V
Working Peak Reverse Voltage		V _{RWM}	45	V
Peak Repetitive Reverse Voltage		V _{RRM}	45	V
Average Rectified Output Current @ 60Hz Half Sine Wave, 1 Cycle, T _A =25°C	Per Leg	I _O	30	A
	Total		60	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I _{FSM}	320	A
Operating Junction Temperature		T _J	-55 ~ +150	°C
Storage Temperature		T _{STG}	-55 ~ +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)

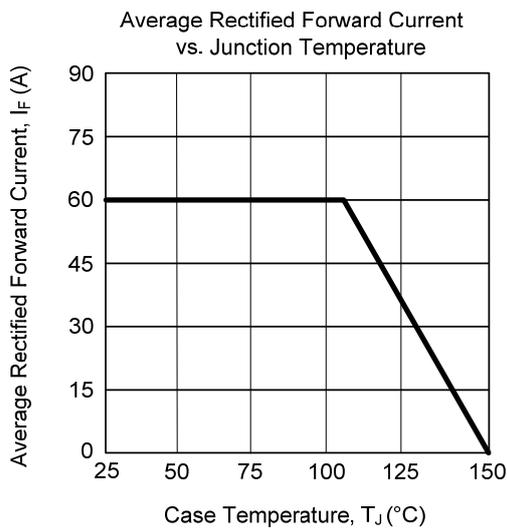
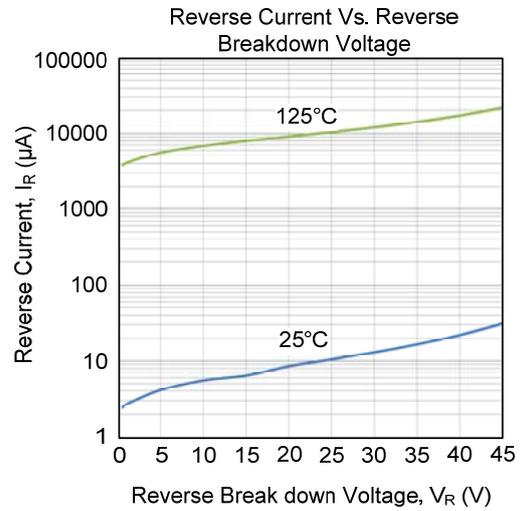
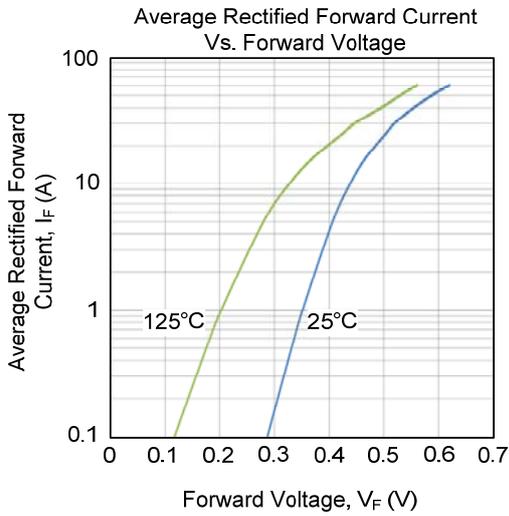
PARAMETER	SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	θ _{JC}	0.5	°C/W

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	V _{(BR)R}	I _R =0.50mA	45			V
Maximum Instantaneous Forward Voltage Drop per Diode (T _J =25°C)	V _F	I _F =30A, T _C =25°C			0.55	V
		I _F =30A, T _C =125°C		0.51		V
		I _F =60A, T _C =25°C		0.62		V
		I _F =60A, T _C =125°C		0.56		V
Leakage Current	I _R	V _R =45V, T _J =25°C			200	μA
		V _R =45V, T _J =100°C			10	mA

Note: Pulse Test: Pulse width ≤ 300μs, Duty cycle ≤ 2%.

■ TYPICAL CHARACTERISTICS



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