



## MBR2045C

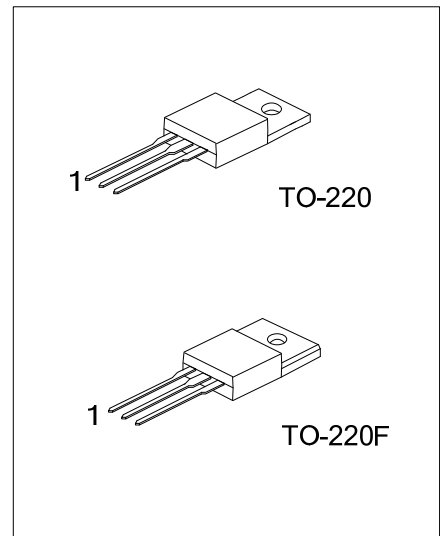
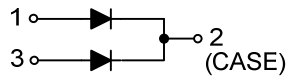
DIODE

### 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

Order Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
MBR2045CL-TA3-T	MBR2045CG-TA3-T	TO-220	A	K	A	Tube
MBR2045CL-TF3-T	MBR2045CG-TF3-T	TO-220F	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>MBR2045CL-TA3-T</p> <p>(1) Packing Type (2) Package Type (3) L: Lead Free</p>	<p>(1) T: Tube (2) TA3: TO-220, TF3: TO-220F (3) G: Halogen Free, L: Lead Free</p>
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■ ELECTRICAL CHARACTERISTICS RATINGS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT	
Maximum Repetitive Peak Reverse Voltage	V <sub>R</sub> RM	45	V	
Maximum non-repetitive Peak Reverse Voltage	V <sub>RM</sub>	45	V	
Maximum DC Blocking Voltage	V <sub>R</sub>	45	V	
Maximum PMS Reverse Voltage	V <sub>R(RMS)</sub>	31.5	V	
Average Rectified Output Current (T <sub>C</sub> =125°C) (Note 1)	I <sub>OUT</sub>	20	A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave	I <sub>FSM</sub>	150	A	
Forward Voltage Drop	V <sub>FM</sub>	I <sub>F</sub> =20A, T <sub>C</sub> =25°C	0.84	V
		I <sub>F</sub> =20A, T <sub>C</sub> =125°C	0.72	V
		I <sub>F</sub> =10A, T <sub>C</sub> =25°C	0.70	V
		I <sub>F</sub> =10A, T <sub>C</sub> =125°C	0.57	V
Peak Reverse Current at Rated DC Blocking Voltage	I <sub>RM</sub>	T <sub>C</sub> = 25°C	0.1	mA
		T <sub>C</sub> =125°C	15	mA
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	650	pF	
Operating Temperature	T <sub>J</sub>	-65 ~ +150	°C	
Storage Temperature	T <sub>STG</sub>	-65 ~ +150	°C	

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

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