

Schottky Barrier Rectifier

MBR2045CT

FEATURES

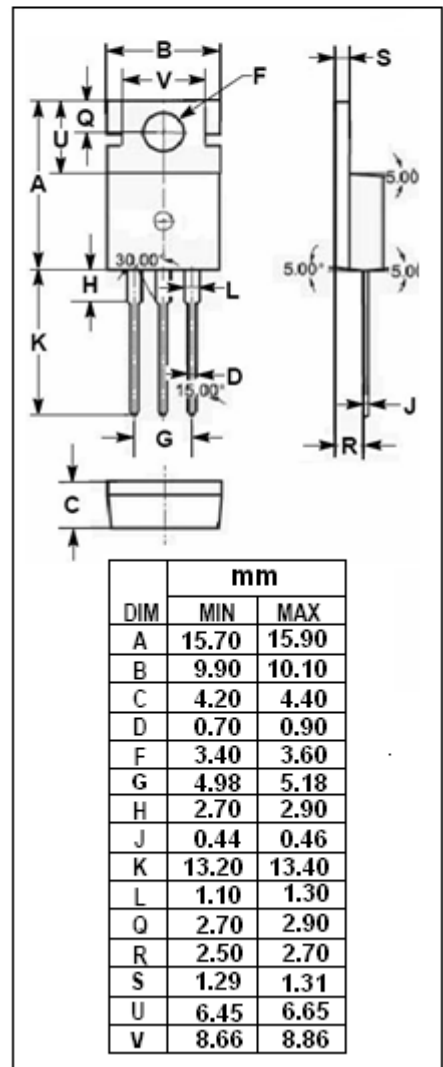
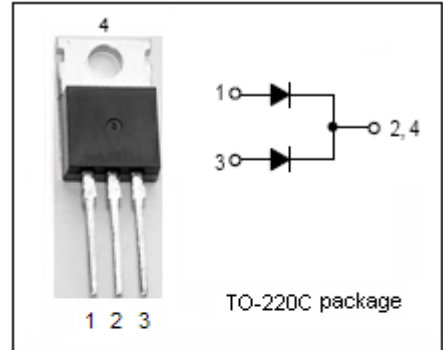
- Dual Rectifier Conduction, Positive Center Tap
- Metal Silicon Junction, Majority Carrier Conduction
- Low Power Loss/High Efficiency
- High Current Capability, Low Forward Voltage Drop
- High Surge Capacity
- Guarding for Overvoltage protection
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

MECHANICAL CHARACTERISTICS

- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- High Temperature Soldering Guaranteed: 250°C Max. for 10 Seconds

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM}	DC Blocking Voltage	45	V
I _{F(AV)}	Average Rectified Forward Current T _C = 125°C	20	A
I _{FSM}	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	250	A
T _J	Junction Temperature	170	°C
T _{stg}	Storage Temperature Range	-50~170	°C



Schottky Barrier Rectifier**MBR2045CT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.0	$^{\circ}C/W$

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width $\leq 300\ \mu s$, Duty Cycle $\leq 2\%$)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F = 10A ; T_C = 25^{\circ}C$	0.69	V
I_R	Maximum Instantaneous Reverse Current	$V_R = 45V, T_C = 25^{\circ}C$	20	μA