

Schottky Barrier Rectifier

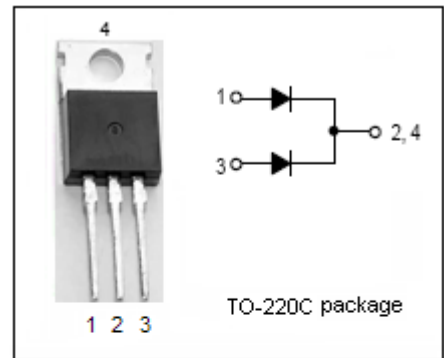
MBR2030CT

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

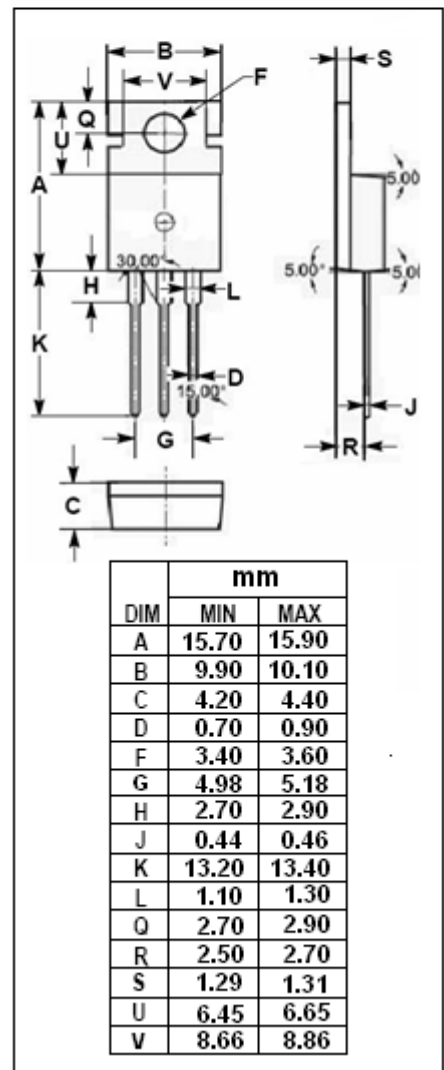
MECHANICAL CHARACTERISTICS

- 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 _{R(RM)} V _{R(WM)} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	30	V
V _{R(RMS)}	RMS Reverse Voltage	21	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	150	A
I _{R(RM)}	Peak Repetitive Reverse Current (2.0 μ s, 1.0kHz)	1.0	A
T _J	Junction Temperature	-65~150	°C
T _{stg}	Storage Temperature Range	-65~175	°C
dv/dt	Voltage Rate of Change (Rated V _R)	1000	V/ μ s



Schottky Barrier Rectifier**MBR2030CT****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 μ s,Duty Cycle \leq 2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=10A; T_C=125^{\circ}C$ $I_F=20A; T_C=25^{\circ}C$ $I_F=20A; T_C=125^{\circ}C$	0.57 0.84 0.72	V
I_R	Maximum Instantaneous Reverse Current	Rated DC Voltage, $T_C=25^{\circ}C$ Rated DC Voltage, $T_C=125^{\circ}C$	0.1 15	mA