

## Schottky Barrier Rectifier

## MBR30100CT

### FEATURES

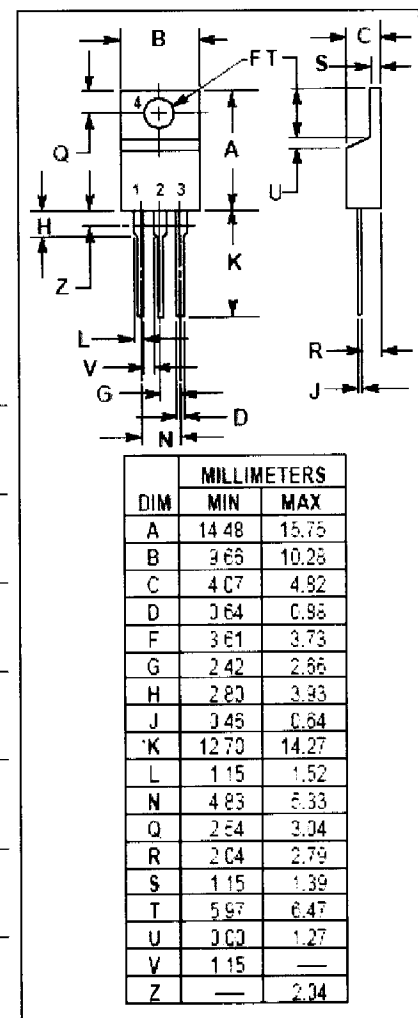
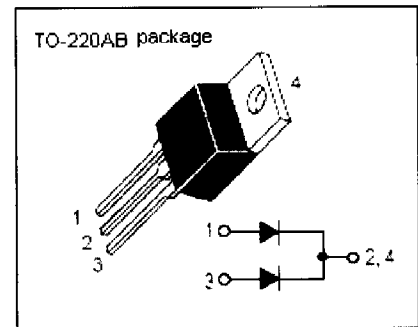
- Dual Rectifier Conduction, Positive Center Tap
- Low Power Loss/High Efficiency
- High Current Capability, Low Forward Voltage Drop
- High Surge Capacity
- Guarding for Overvoltage protection
- For AC/DC switching adaptor and other switching power supply applications.

### MECHANICAL CHARACTERISTICS

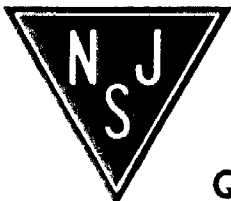
- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable

### ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{RRM}$	Peak Repetitive Reverse Voltage	100	V
$I_{F(AV)}$	Average Rectified Forward Current $T_C=100^\circ\text{C}$	30	A
$I_{FSM}$	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	200	A
$T_J$	Junction Temperature	-55~150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~175	$^\circ\text{C}$
dv/dt	Voltage Rate of Change (Rated $V_R$ )	10,000	V/ $\mu\text{s}$



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**Schottky Barrier Rectifier****MBR30100CT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	3.25	$^{\circ}C/W$

**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	$I_F = 15A ; T_C = 25^{\circ}C$	0.85	V
$I_R$	Maximum Instantaneous Reverse Current	Rated DC Voltage, $T_C = 25^{\circ}C$ Rated DC Voltage, $T_C = 100^{\circ}C$	0.2 40	mA