

## Schottky Barrier Rectifier

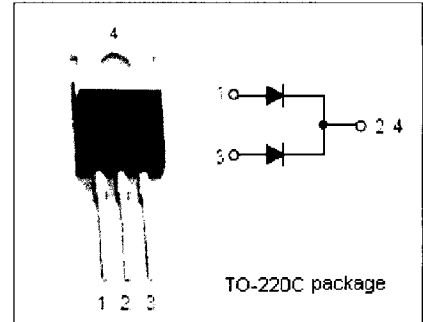
**MBR10200CT**

### FEATURES

- Low Forward Voltage
- 150°C Operating Junction Temperature
- Guaranteed Reverse Avalanche
- Low Power Loss/High Efficiency
- High Surge Capacity
- Low Stored Charge Majority Carrier Conduction

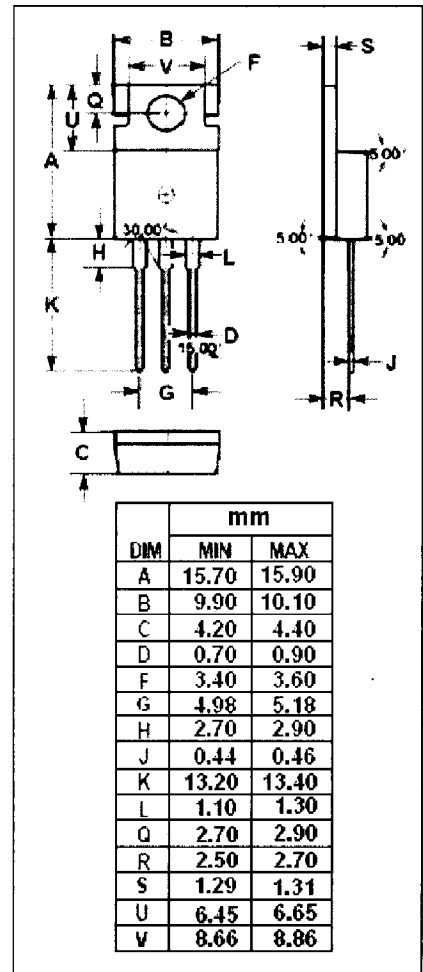
### MECHANICAL CHARACTERISTICS

- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds

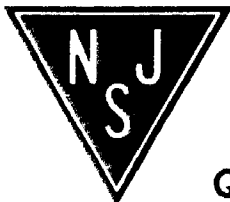


### ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{RRM}$ $V_{RWM}$ $V_R$	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	200 140 200	V
$I_{F(AV)}$	Average Rectified Forward Current (Rated $V_R$ ) $T_C=133^\circ\text{C}$	10	A
$I_{FSM}$	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	150	A
$T_J$	Junction Temperature	-55~150	°C
$T_{stg}$	Storage Temperature Range	-55~175	°C
dv/dt	Voltage Rate of Change (Rated $V_R$ )	10,000	V/ $\mu$ s



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**Schottky Barrier Rectifier****MBR10200CT****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=300  $\mu$  s, Duty Cycle  $\leq$  2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F = 5A ; T_C = 25^{\circ}C$	0.95	V
$I_R$	Maximum Instantaneous Reverse Current	Rated DC Voltage, $T_C = 25^{\circ}C$ Rated DC Voltage, $T_C = 125^{\circ}C$	0.2 40	mA