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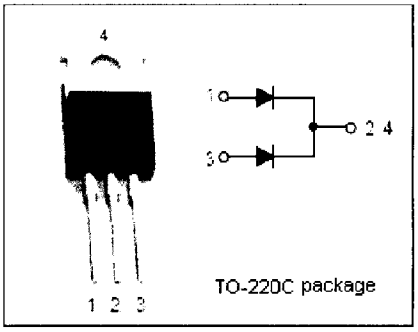
Schottky Barrier Rectifier

MBR10200CT

FEATURES

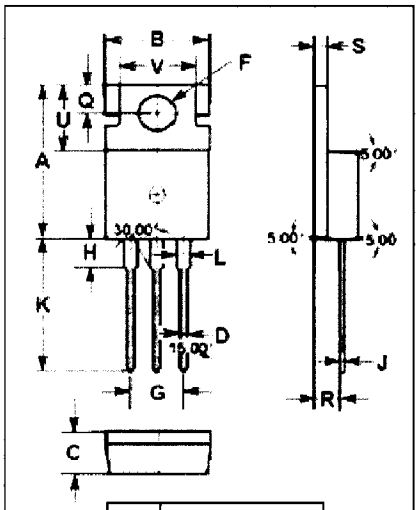
- Low Forward Voltage
- 150℃ Operating Junction Temperature
- Guaranteed Reverse Avalanche
- Low Power Loss/High Efficiency
- High Surge Capacity
- Low Stored Charge Majority Carrier Conduction



TO-220C package

MECHANICAL CHARACTERISTICS

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



DIM	mm MIN	mm MAX
A	15.70	15.90
B	9.90	10.10
C	4.20	4.40
D	0.70	0.90
F	3.40	3.60
G	4.98	5.18
H	2.70	2.90
J	0.44	0.46
K	13.20	13.40
L	1.10	1.30
Q	2.70	2.90
R	2.50	2.70
S	1.29	1.31
U	6.45	6.65
V	8.66	8.86

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

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℃	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	℃
T_{stg}	Storage Temperature Range	-55~175	℃
dv/dt	Voltage Rate of Change (Rated VR)	10,000	V/μs

THERMAL CHARACTERISTICS

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

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μ s,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F= 5A ; T_C= 25℃	0.95	V
I_R	Maximum Instantaneous Reverse Current	Rated DC Voltage, T_C= 25℃ Rated DC Voltage, T_C= 125℃	0.2 40	mA