

Schottky Barrier Rectifier

MBR16100

FEATURES

- Low Forward Voltage
- 170°C Operating Junction Temperature
- Low Power Loss/High Efficiency
- High Surge Capacity

APPLICATIONS

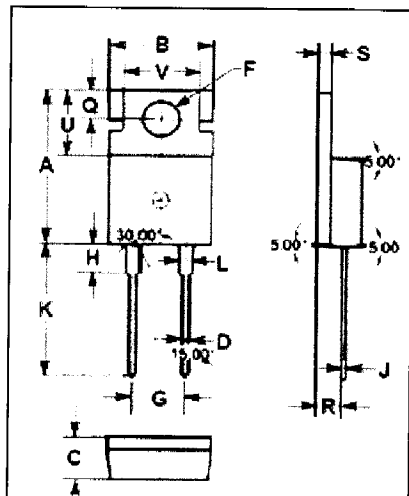
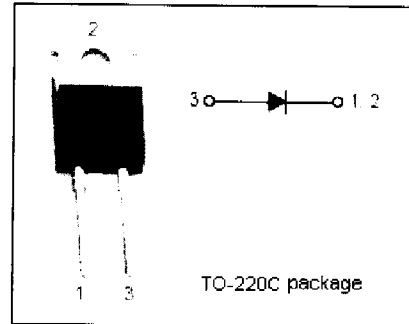
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

MECHANICAL CHARACTERISTICS

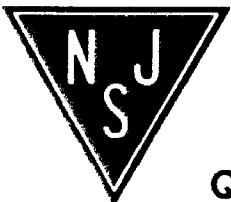
- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM}	DC Blocking Voltage	100	V
I _{F(AV)}	Average Rectified Forward Current (Rated V _R) T _C = 133°C	8	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	210	A
T _J	Junction Temperature	170	°C
T _{stg}	Storage Temperature Range	-50~170	°C



DIM	mm	
	MIN	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



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	3.0	$^{\circ}C/W$

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F = 8A ; T_C = 25^{\circ}C$	0.85	V
I_R	Maximum Instantaneous Reverse Current	$V_R = 100V, T_C = 25^{\circ}C$	10	μA