

Schottky Barrier Rectifier

MBR30100

FEATURES

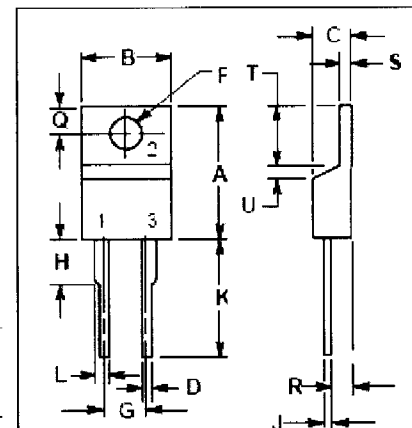
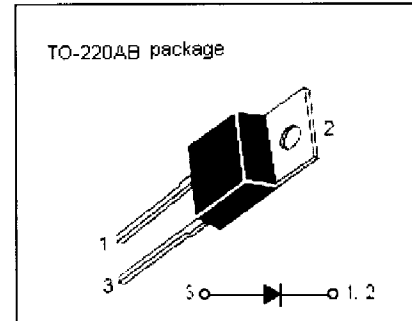
- Dual Rectifier Conduction, Positive Center Tap
- Low Power Loss/High Efficiency
- High Current Capability, Low Forward Voltage Drop
- High Surge Capacity
- Guarding for Overvoltage protection
- For AC/DC switching adaptor and other switching power supply applications.

MECHANICAL CHARACTERISTICS

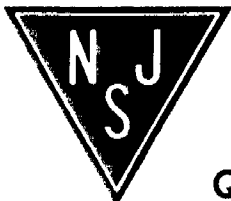
- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM}	Peak Repetitive Reverse Voltage	100	V
I _{F(AV)}	Average Rectified Forward Current T _C = 100°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	°C
T _{stg}	Storage Temperature Range	-55~175	°C
dv/dt	Voltage Rate of Change (Rated V _R)	10,000	V/μs



DIM	MILLIMETERS	
	MIN	MAX
A	15.11	15.75
B	9.65	10.29
C	4.06	4.82
D	0.64	0.89
F	3.61	3.73
G	4.62	5.33
H	2.79	3.30
J	0.46	0.64
K	12.70	14.27
L	1.14	1.52
Q	2.54	3.04
R	2.04	2.79
S	1.14	1.39
T	5.97	6.48
U	0.300	1.27



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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