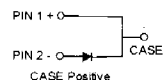


## MBR1635 - MBR1660

### Features

- Low power loss, high efficiency.
- High surge capacity.
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- Metal silicon junction, majority carrier conduction.
- High current capacity, low forward voltage drop.
- Guard ring for over voltage protection.



1 2  
TO-220AC

## Schottky Rectifiers

### Absolute Maximum Ratings\*

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Value				Units
		1635	1645	1650	1660	
$V_{RRM}$	Maximum Repetitive Reverse Voltage	35	45	50	60	V
$I_{F(AV)}$	Average Rectified Forward Current .375" lead length @ $T_A = 125^\circ\text{C}$	16				A
$I_{FSM}$	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	150				A
$T_{stg}$	Storage Temperature Range	-65 to +175				$^\circ\text{C}$
$T_J$	Operating Junction Temperature	-65 to +150				$^\circ\text{C}$

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

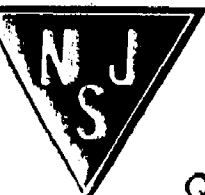
### Thermal Characteristics

Symbol	Parameter	Value	Units
$P_D$	Power Dissipation	2.0	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	60	$^\circ\text{C/W}$
$R_{\theta JL}$	Thermal Resistance, Junction to Lead	1.5	$^\circ\text{C/W}$

### Electrical Characteristics

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Device				Units
		1635	1645	1650	1660	
$V_F$	Forward Voltage $I_F = 16\text{ A}, T_C = 25^\circ\text{C}$ $I_F = 16\text{ A}, T_C = 125^\circ\text{C}$	0.63		0.75		V
		0.57		0.65		V
$I_R$	Reverse Current @ rated $V_R$ $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	0.2		1.0		mA
		40		50		mA
$I_{RRM}$	Peak Repetitive Reverse Surge Current 2.0 us Pulse Width, $f = 1.0\text{ KHz}$	1.0		0.5		A



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.