

New Jersey Semi-Conductor Products, Inc.

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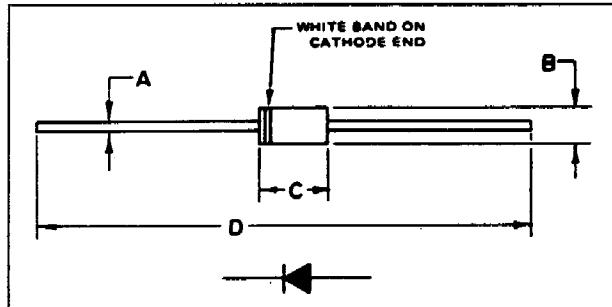
TELEPHONE: (201) 376-2922
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VHE605 – VHE620

6 Amp Epitaxial High Efficiency Rectifiers

50 Volt, 100 Volt, 150 Volt and 200 Volt V_{RRM}
Extremely Low Leakage at High Temperature
High Surge Capability
Very Fast Switching Speeds
Minimum Sized, Low Cost Epoxy Encapsulation
Glass Passivated

LTR.	INCHES	MILLIMETERS
A	.048-.052 Dia.	1.22-1.32 Dia.
B	.20 Dia.	5.08 Dia.
C	.360-.370	9.14-9.40
D	2.3-2.4	69.85
E	1.137-1.237	28.33-31.42



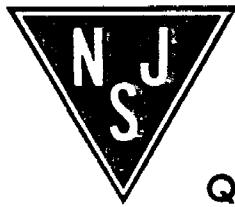
MAXIMUM RATINGS ($T_J = 25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	VHE605	VHE610	VHE615	VHE620	UNITS
DC Blocking Voltage	V_{RM}					
Working Peak Reverse Voltage	V_{RWM}	50	100	150	200	Volts
Peak Repetitive Reverse Voltage	V_{RPM}					
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	105	140	Volts
Average Rectified Forward Current @ $T_J = 75^\circ\text{C}$, $L = .375"$	I_0			6.0		Amps
Peak Surge Current (non-rep), $\frac{1}{2}$ cycle, 60 Hz	I_{FSM}			150.0		Amps
Operating and Storage Temperature Range	T_J, T_{STG}			-65 to +150		°C

ELECTRICAL CHARACTERISTICS ($T_J = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL			UNITS
Maximum Instantaneous Forward Voltage Drop $I_F = 4\text{A}$ $I_F = 6\text{A}$	V_{FM}	$T_J = 25^\circ\text{C}$ 0.875 0.925	$T_J = 100^\circ\text{C}$.80 .85	Volts
Maximum Reverse Current at Rated V_{RM} $T_J = 25^\circ\text{C}$ $T_J = 150^\circ\text{C}$	I_{RM}		5.0 150.0	µAmps
Maximum Reverse Recovery Time $I_F = 0.5\text{A}$, $I_R = 1\text{A}$ $I_{REC} = 0.25\text{A}$	t_{rr}		30	nsec
Typical Junction Capacitance (1)	C_T		50	pF

(1) Measured at 1 MHz and an applied voltage of -10 volts.



Quality Semi-Conductors