New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

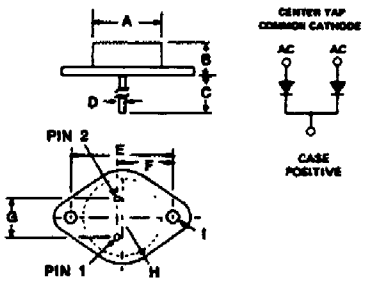
TELEPHONE: (973) 376-2922
(212) 227-6005
FAX: (973) 376-8960

VHE2601 – VHE2604

50 Amp Epitaxial Center Tapped High Efficiency Rectifiers

50 Volt, 100 Volt, 150 Volt and 200 Volt V_{RRM}
Low Thermal Resistance
Extremely Low Leakage at High Temperature
High Surge Capability
Very Fast Switching Speeds
Glass Passivated
Standard TO3 Case

LTR.	INCHES	MILLIMETERS
A	.74– .76 Dia.	18,8 –19,3 Dia.
B	.323– .342	8,20– 8,69
C	.40 Min.	10,16
D	.038– .043 Dia.	,97– 1,09 Dia.
E	1.180–1.194	29,97–30,33
F	.665– .675	16,89–17,15
G	.426– .440	10,82–11,18
H	.525R Max.	13,34
I	.151– .161 Dia.	3,84– 4,09



All JEDEC TO-3 dimensions and notes are applicable.

MAXIMUM RATINGS (At T_J = 25°C unless otherwise noted)

RATINGS	SYMBOL	VHE2601	VHE2602	VHE2603	VHE2604	UNITS
DC Blocking Voltage Working Peak Reverse Voltage Peak Repetitive Reverse Voltage	V_R V_{RWM} V_{RRM}	50	100	150	200	Volts
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	105	140	Volts
Average Rectified Forward Current @ T_C = 115°C	I_O	50				Amps
Peak Surge Current (non-rep), ½ cycle, 60 Hz	I_{FSM}	500				Amps
Thermal Resistance, Junction to Case	$R_{\theta JC}$	0.8				°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	– 65 to + 175				°C

ELECTRICAL CHARACTERISTICS (At T_J = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL			UNITS
Maximum Instantaneous Forward Voltage per diode I_F = 15A I_F = 25A I_F = 100A	V_{FM}	T_J = 25°C 0.93 1.0 1.4	T_J = 125°C 0.8 0.87 1.3	Volts
Maximum Reverse Current at Rated V_{RM} per diode T_J = 25°C T_J = 125°C T_J = 175°C	I_{RM}	20 200 1000		μA
Maximum Reverse Recovery Time, I_F = ½A, I_R = 1A, I_{RR} = 0.25A	t_{rr}	35		nsec
Maximum Capacitance, V_R = 10V	C_J	500		pF

Quality Semi-Conductors