

VH247 - VH1048

6 Amp Epoxy Bridge Rectifiers VH Series

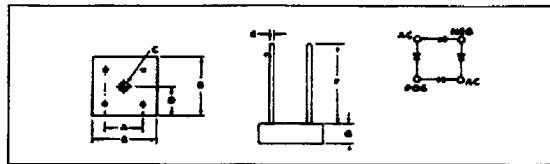
Glass Passivated Silicon Chips

Controlled Avalanche Series with 250V, 450V,
 650V, and 850V Minimum Avalanche Ratings

Non-controlled Avalanche Series with 50V, 100V,
 200V, 400V, 600V, 800V, and 1000V V_{RRM} Ratings

100 Amps Peak One Half Cycle Surge Current

LTR.	INCHES	MILLIMETERS
A	.411-.441	10.44-11.20
B	.590-.610	14.99-15.49
C	.137-.167 Dia.	3.48-4.24 Dia.
D	.295-.305	7.49-7.75
E	.037-.043 Dia.	.94-1.09 Dia.
F	1.0 Min.	25.4 Min.
G	.185-.205	4.69-5.21



MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise specified)

RATINGS	SYMBOL	CONTROLLED AVALANCHE				NON-CONTROLLED AVALANCHE						UNITS		
		VH247	VH447	VH647	VH847	VH048	VH148	VH248	VH448	VH648	VH848		VH1048	
Series Number		VH247	VH447	VH647	VH847	VH048	VH148	VH248	VH448	VH648	VH848	VH1048		
DC Blocking Voltage	V_{RM}	200	400	600	800	50	100	200	400	600	800	1000	Volts	
Working Peak Reverse Voltage	V_{RSM}													
Peak Repetitive Reverse Voltage	V_{RRM}													
RMS Reverse Voltage	V_{RRMS}	140	280	420	560	35	70	140	280	420	560	700	Volts	
Power Dissipation in V_{RM} Region for 100 μSEC Square Wave	P_{RM}	400				NA						Watts		
Continuous Power Dissipation in V_{RM} Region at $T_{RS} = 80^\circ\text{C}$	P_R	2				NA						Watts		
Fusing Data	I^2t							40						Amps ² Sec.
Peak Surge Current, 1/2 Cycle at 60 Hz (Non-Rep) at $T_{HS} = 80^\circ\text{C}$ (Fig. 2)	I_{SM}							100						Amps
Peak Surge Current, 1 sec. at 60 Hz and $T_{HS} = 80^\circ\text{C}$ (Fig. 2)	I_{RM}							25						Amps
Avg. Forward Current at $T_{RS} = 80^\circ\text{C}$ (Fig. 1)	I_o							6						Amps
Junction Operating and Storage Temperature Range	T_J, T_{STG}							-50 to +150						$^\circ\text{C}$
Maximum soldering temperature and time								10 Sec at 265°C						

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

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Series Number		VH247	VH447	VH647	VH847	VH048	VH148	VH248	VH448	VH648	VH848	VH1048		
Minimum Avalanche Voltage	V_{AVM}	250	450	650	850	NA						Volts		
Maximum Avalanche Voltage	V_{AVM}	700	900	1100	1300	NA						Volts		
Maximum Instantaneous Forward Voltage Drop (Per Diode) at 6 Amps (Fig. 3)	V_{FM}							1.3						Volts/Leg
Maximum Reverse Current at Rated V_{RM}	I_{RM}							5						μA
Maximum Reverse Current at Rated V_{RM} at $T_J = 125^\circ\text{C}$	I_{RM}							1.0						mA
Insulation Strength From Circuit to Case (min.)								2000						Volts DC
Thermal Resistance (Typ.)														
Junction to case (on heat sink)	R_{JC}							6						$^\circ\text{C}/\text{W}$
Junction to air (no heat sink)	R_{JA}							25						$^\circ\text{C}/\text{W}$

Part Nos. VH247, VH447, VH647, VH847, VH048, VH148, VH248, VH448, VH648, and VH848 have been recognized under the Component Program of Underwriters



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