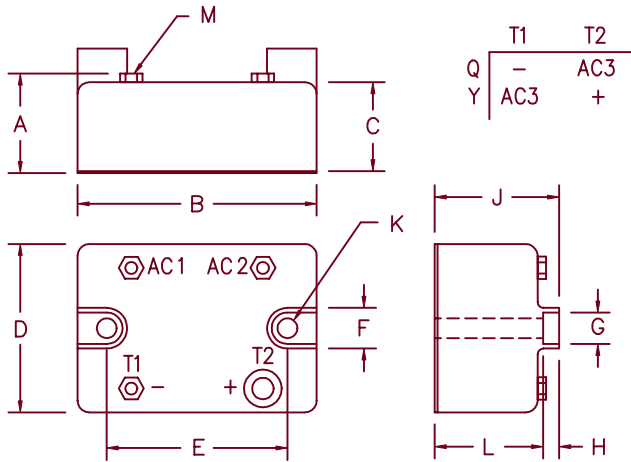


# 3 Phase Bridge Modules EH150Y, EH150Q-



Note: (+) or (-) terminal 1/4-20 tapped hole.

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	1.10	---	27.94	
B	2.25	2.40	57.15	60.96	
C	.930	.950	23.62	24.13	
D	1.740	1.760	44.19	44.70	
E	1.883	1.887	47.82	47.92	
F	.495	.505	12.57	12.83	
G	.325	.335	8.25	8.50	
H	.215	.225	5.46	5.71	
J	1.270	1.300	32.25	33.02	
K	.198	.208	5.02	5.28	Dia.
L	1.055	1.075	26.79	27.30	
M					#10-32 TAPPED HOLES

Microsemi Catalog  
Number

EH15002Y	EH15002Q-
EH15004Y	EH15004Q-
EH15006Y	EH15006Q-
EH15008Y	EH15008Q-
EH15010Y	EH15010Q-
EH15012Y	EH15012Q-
EH15014Y	EH15014Q-

Repetitive Peak  
Reverse Voltage

200
400
600
800
1000
1200
1400

Both Q- and Y Part Numbers are needed to complete 3 $\phi$  Rectification

- Maximum surge current 1600 Amps
- High terminal-to-base isolation of 2500VAC RMS
- Available to 1400 Volts
- Mounting bolts isolated from power terminals

## Electrical Characteristics

Maximum DC output current, 3 phase	$I_o$ 150 Amps	$T_C = 128^\circ\text{C}$ , $R_{\theta JC} = 0.7^\circ\text{C/W}$
Maximum surge current per diode	IFSM 1600 Amps	8.3ms, half sine, $T_J = 175^\circ\text{C}$
Max. $I^2t$ for fusing	$I^2t$ 10600 A <sup>2</sup> s	
Max. peak forward voltage per diode	$V_{FM}$ 1.0 Volt	$I_{FM} = 50\text{A}$ ; $T_J = 25^\circ\text{C}^*$
Max. peak reverse current per diode	$I_{RM}$ 25 $\mu\text{A}$	$V_{RRM}$ , $T_J = 25^\circ\text{C}$
Max. peak reverse current per diode	$I_{RM}$ 6 mA	$V_{RRM}$ , $T_J = 150^\circ\text{C}$
Minimum isolation voltage	$V_{ISOL}$ 1500 VRMS	any terminal-to-base

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

## Thermal and Mechanical Characteristics

Storage temp range	$T_{STG}$	$-55^\circ\text{C}$ to $+175^\circ\text{C}$
Operating junction temp range	$T_J$	$-55^\circ\text{C}$ to $+175^\circ\text{C}$
Max thermal resistance per diode	$R_{\theta JC}$	$0.7^\circ\text{C/W}$ Junction to case
Typical thermal resistance	$R_{\theta CS}$	$0.07^\circ\text{C/W}$ Case to sink
Mounting torque		20-25 inch pounds
Weight		6.4 ounces (182 grams) typical



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1-10-01 Rev. 4

# EH150Y, EH150Q-

Figure 1  
Typical Forward Characteristics – Per Diode

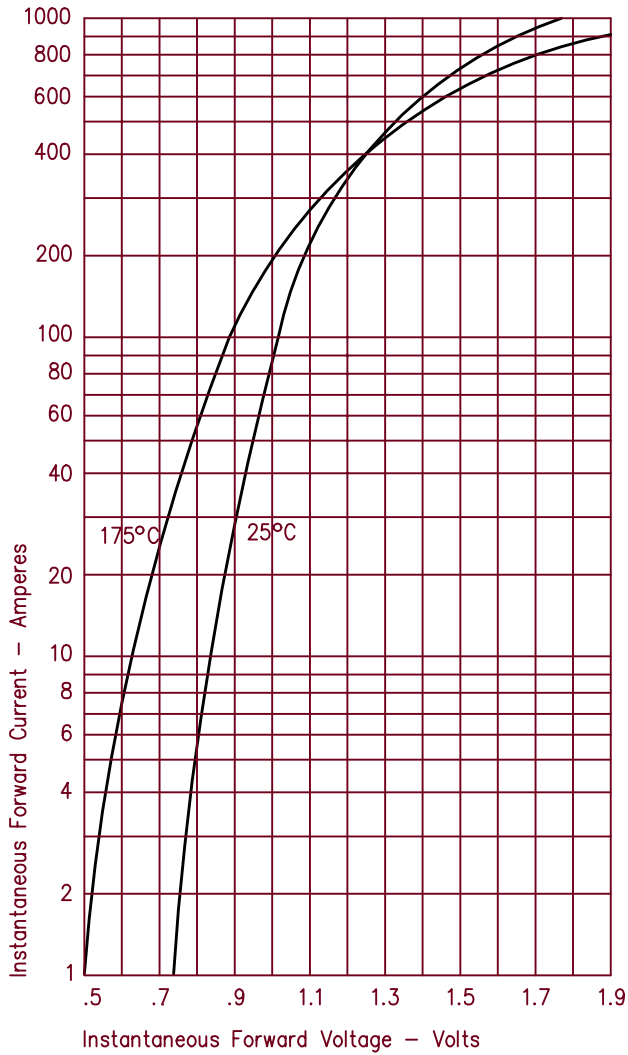


Figure 3  
Maximum Nonrepetitive Surge Current – Per Diode

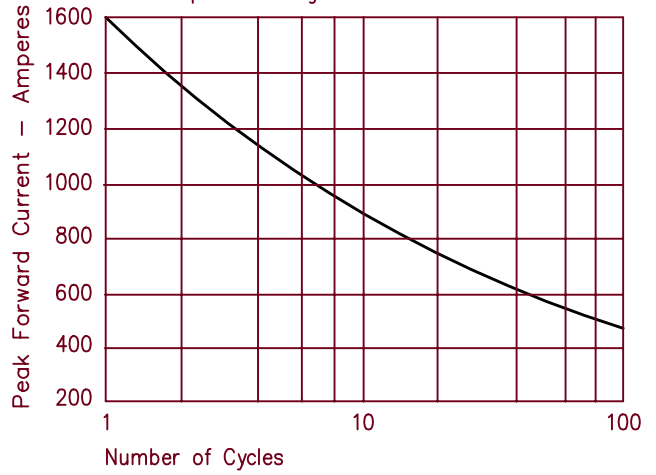
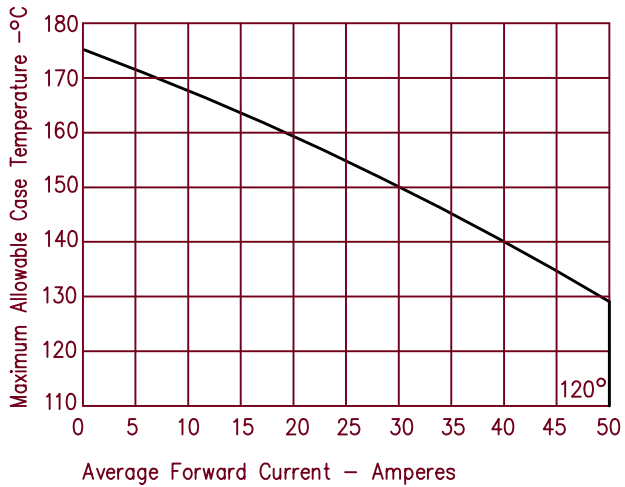


Figure 2  
Forward Current Derating – Per Diode





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