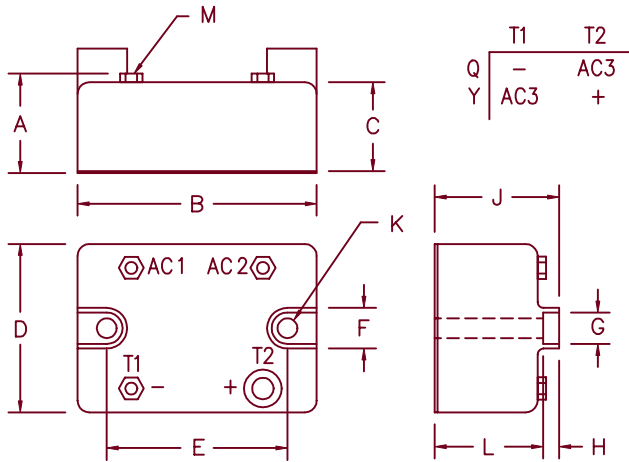


3 Phase Bridge Modules EH150Y, EH150Q—



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 3Ø 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	I_{FSM} 1600 Amps	8.3ms, half sine, $T_J = 175^\circ\text{C}$
Max. I^2t for fusing	I^2t 10600 A^2s	
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 μA	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 μsec , Duty cycle 2%

Thermal and Mechanical Characteristics

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

EH150Y, EH150Q—

Figure 1
Typical Forward Characteristics — Per Diode

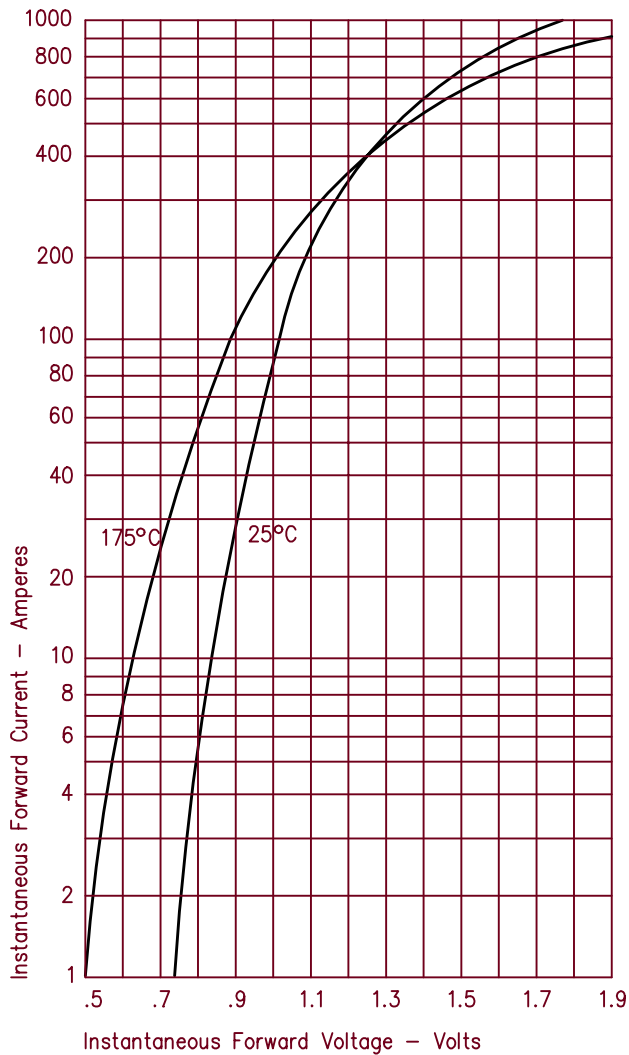


Figure 3
Maximum Nonrepetitive Surge Current — Per Diode

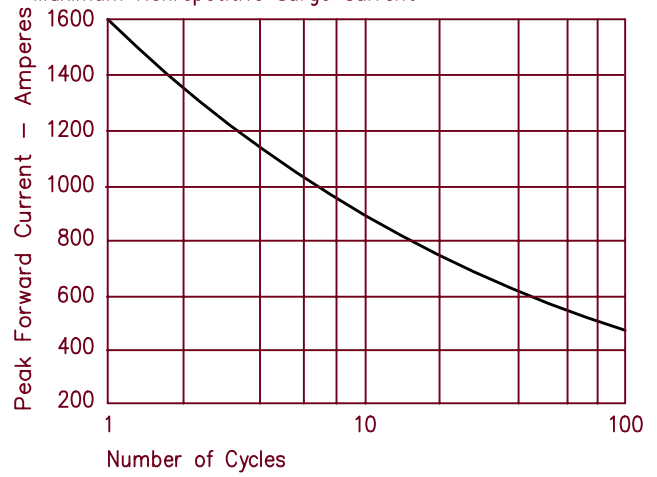


Figure 2
Forward Current Derating — Per Diode

