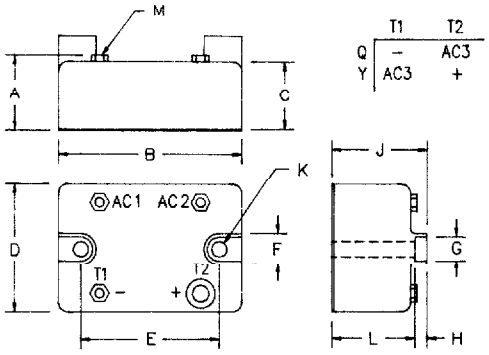
3 Phase Bridge Modules
EH150Y, EH150Q–



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

Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
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		Repetitive Peak Reverse Voltage
EH15002Y	EH15002Q–	200
EH15004Y	EH15004Q–	400
EH15006Y	EH15006Q–	600
EH15008Y	EH15008Q–	800
EH15010Y	EH15010Q–	1000
EH15012Y	EH15012Q–	1200
EH15014Y	EH15014Q–	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

E

Electrical Characteristics

Maximum DC output current, 3 phase	Io 150 Amps	T_C = 128°C, 120°conduction, $R_{\theta JC}$ = 0.7°C/W
Maximum surge current per diode	IFSM 1600 Amps	8.3ms, half sine, T_J = 175°C
Max. I^2t for fusing	I^2t 10600 A^2s	
Max. peak forward voltage per diode	V_{FM} 1.0 Volt	I_{FM} = 50A; T_J = 25°C*
Max. peak reverse current per diode	I_{RM} 5 μA	V_{RRM}, T_J = 25°C
Max. peak reverse current per diode	I_{RM} 3 mA	V_{RRM}, T_J = 150°C*
Minimum isolation voltage	V_{ISOL} 2500 V_{RMS}	any terminal–to–base

*Pulse test: Pulse width 300 μsec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temp range	T_{STG}	–40°C to + 175°C
Operating junction temp range	T_J	–40°C to + 175°C
Max thermal resistance per diode	$R_{\theta JC}$	0.7°C/W Junction to case
Typical thermal resistance per diode	$R_{\theta JC}$	0.5°C/W Junction to case
Max mounting torque		20 inch pounds
Typical thermal resistance	$R_{\theta CS}$	0.07°C/W Case to sink
Weight		6.4 ounces (182 grams) typical

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Microsemi Corp. Colorado

EH150Y, EH150Q–

Figure 1
Typical Forward Characteristics – Per Diode

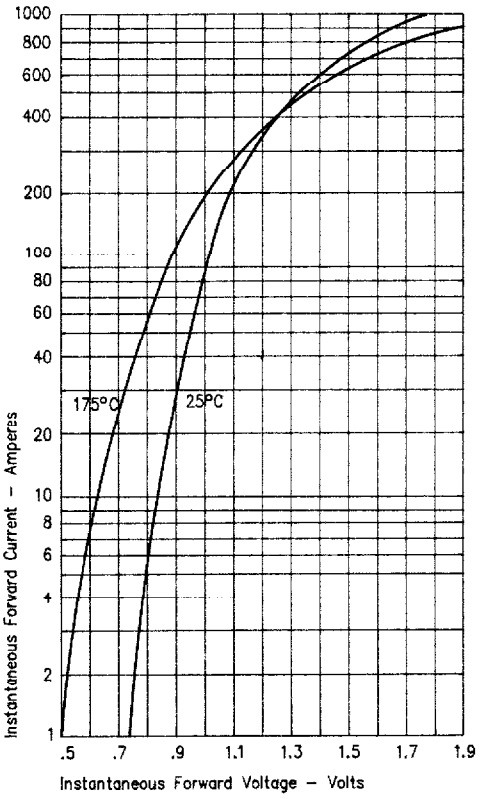

Figure 2
Forward Current Derating – Per Diode

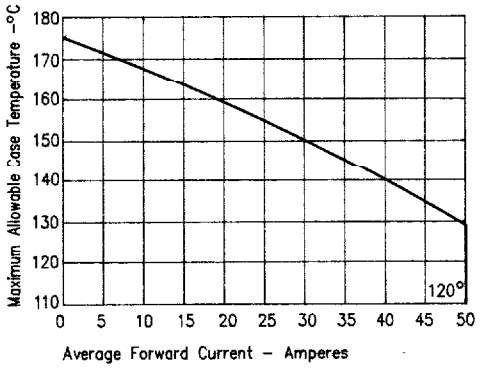

Figure 3
Maximum Nonrepetitive Surge Current – Per Diode