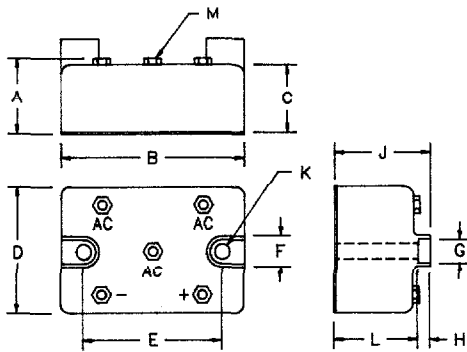


# 3 Phase Bridge Modules EH80, EH100



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				

**E**

Microsemi Catalog Number	Repetitive Peak Reverse Voltage	
EH8002Zi*	EH10002Zi*	200
EH8004Zi*	EH10004Zi*	400
EH8006Zi*	EH10006Zi*	600
EH8008Zi*	EH10008Zi*	800
EH8010Zi*	EH10010Zi*	1000
EH8012Zi*	EH10012Zi*	1200

\*Add S for Transient Suppressor across output

- Integral Transient Suppression Available
- High Terminal-to-base Isolation of 2500VAC RMS
- Available to 1200V
- Mounting Bolts Isolated From Power Terminals

Electrical Characteristics				
	EH80	EH100		
Maximum DC output current, 3-phase	I <sub>o</sub> 80A	100A	Sine wave, 120° conduction	
Maximum case temperature	T <sub>c</sub> 138°C	141°C		
Maximum surge current per diode	I <sub>FSM</sub> 1050A	1500A	8.3ms, half sine, T <sub>J</sub> = 175°C	
Max. I <sup>2</sup> t for fusing	I <sup>2</sup> t 4600A <sup>2</sup> S	9300A <sup>2</sup> S		
Max. peak forward voltage per diode	V <sub>FM</sub> 1.2V	1.1V	• I <sub>o</sub> ; T <sub>J</sub> = 25°C	
Max. peak reverse voltage per diode	IRM 4mA		V <sub>RRM</sub> ; T <sub>J</sub> = 150°C	
Minimum isolation voltage	V <sub>SOL</sub> 2500V <sub>RMS</sub>		any terminal-to-base	

Thermal and Mechanical Characteristics		
Storage temp range	T <sub>STG</sub>	-40°C to 175°C
Operating junction temp range	T <sub>J</sub>	-40°C to 175°C
Max thermal resistance per diode	EH80 R <sub>θJC</sub>	1.0°C/W Junction to case
	EH100 R <sub>θJC</sub>	0.85°C/W Junction to case
Max mounting torque		30 lb-in
Typical thermal resistance	R <sub>θCS</sub>	0.07°C/W Case to sink
Typical Weight		5.8 ounces (165 grams)

**Microsemi Corp.**  
**Colorado**

PH: 303-469-2161  
FAX: 303-466-3775

E-69

# EH80, EH100

Figure 1  
Typical Forward Characteristics - Per Diode

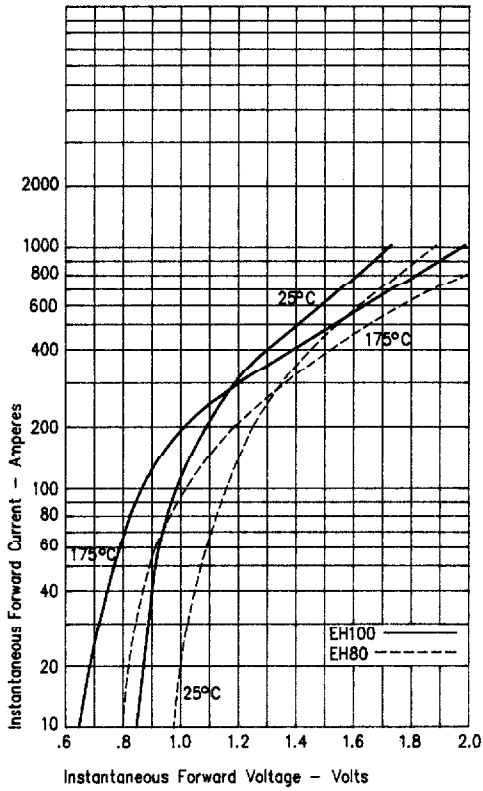


Figure 3  
Maximum Nonrepetitive Surge Current - Per Diode

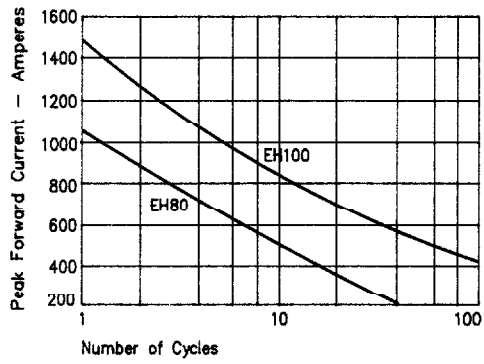


Figure 2  
Forward Current Derating - Per Diode

