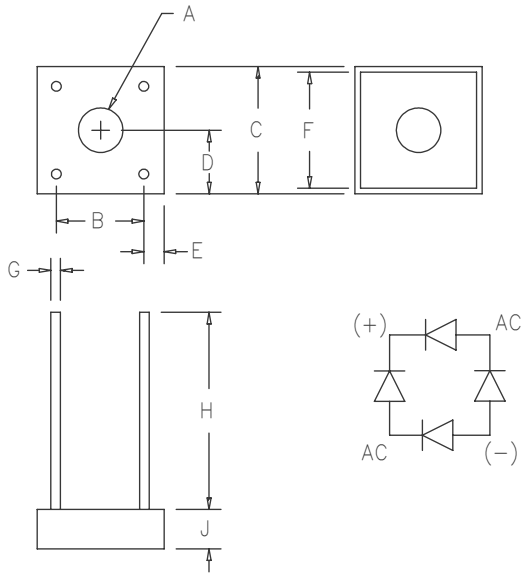
Controlled Avalanche Bridge Rectifiers

VJ247M – VJ847M



Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
A	.137	.167	3.84	2.21	Dia.
B	.411	.441	10.44	11.20	
C	.600	.620	---	---	
D	.295	.310	---	---	
E	.076	.096	---	---	
F	.545	.555	13.85	14.10	
G	.076	.096	.970	1.07	
H	1.0 Min.		25.40 Min.		
J	.195	.215	4.95	5.46	

Microsemi Catalog Number	Avalanche Voltage Range
VJ247M	250V – 700V
VJ447M	450V – 900V
VJ647M	660V – 1100V
VJ847M	850V – 1300V

- 10 Amps DC Output
- 100 Amp Surge Current
- 2000V Isolation
- Glass Passivated Die
- ROHS Compliant

Electrical Characteristics

DC Current Output	I_O 10 Amps	T_C = 80°C
Maximum surge current	I_{FSM} 100 Amps	8.3ms, half sine
Max. I^2t for fusing	I^2t 41 A^2s	
Max. peak forward voltage per leg	V_{FM} 1.3 Volts	I_{FM} = 1.0A; T_J = 25°C*
Max. peak reverse current per leg	I_{RM} 5µA	V_{RRM}, T_J = 25°C

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

Thermal and Mechanical Characteristics

Storage temperature range	T_{STG}	–55°C to 175°C
Operating junction temp range	T_J	–55°C to 150°C
Maximum thermal resistance	$R_{\Theta JC}$	3°C/W Junction to case
Mounting torque		12–15 inch pounds (#6 screw)
Weight		.14 ounces (4.5 grams) typical

Figure 1
Typical Forward Characteristics – Per Leg

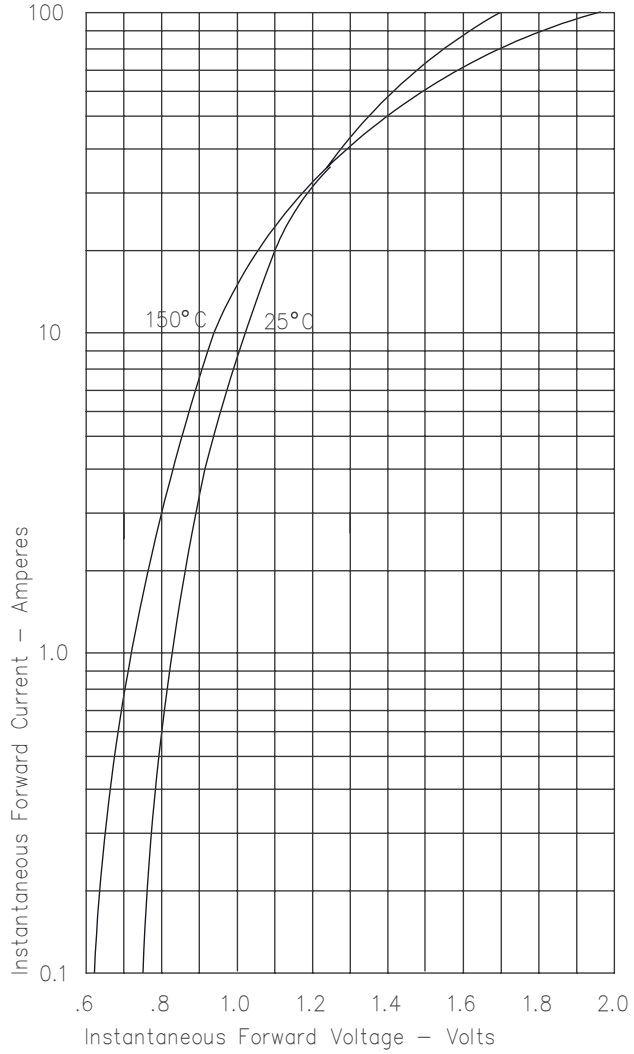


Figure 2
Forward Current Derating – Per Leg